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## CHEMIST AND DRUGGIST

ESTABLISHED 1859

THE WEEKLY NEWSPAPER FOR PHARMACY  
and all sections of the drug, pharmaceutical,  
fine chemical, cosmetic, and allied industries

*Official organ of the Pharmaceutical Society of Ireland  
and of the Pharmaceutical Society of Northern Ireland*

Volume 186

July 23, 1966

No. 4510

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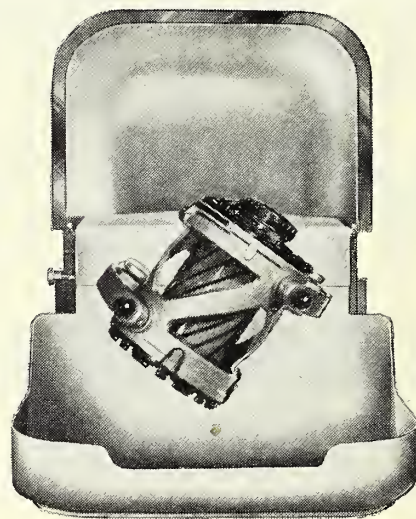
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# C & D

## CHEMIST AND DRUGGIST

Volume 186

JULY 23, 1966

No 4510

## Economic Crisis Measures

### PURCHASE TAX UP 10 PER CENT.

ON July 21 the rate of purchase tax was increased by 10 per cent., thus making the former rate of 25 per cent. (as applied to medicines, unless specifically exempted tax, to toilet preparations and photographic goods) now 27½ per cent. of the wholesale value. The increase was announced by the Prime Minister on July 20 as one of the measures the Government had decided upon for dealing with the current economic crisis. Also affected by a 10 per cent. increase are wines, petrol, power methylated spirit and hydrocarbon oils. Other measures announced include a wages standstill for six months followed by a further six months period of 'severe restraint', a similar standstill on prices of goods and services, and a dividend standstill for 12 months. Parcels, registration and overseas postal rates are increased from October 3.

### Employment Tax

#### EXEMPTION CAMPAIGN

THE Board of the National Chamber of Trade is urging its member chambers to take part in the campaign to amend the selective employment tax. Two changes sought by the Board would ensure that employers of part-timers working less than twenty-one hours per week and of persons of retirement age would have repaid to them the tax remitted. Many members of chambers of trade have urged the Board to take militant action, but the Board refuses to act unconstitutionally. However it is pointed out that some members have not co-operated in the campaign against the Bill because they see no possibility of the withdrawal of the proposal 'since Government supporters would vote for it whether or not they are in favour.' The Board takes the view that where members do not support the protest they will be accepting the tax by default. The Board also recommends that in those cases where prices have to rise as a result of

the tax it should be made clear to the public—both before and subsequent to the operative date, September 5—that the price rises are caused by the Government and not by the traders themselves.

### Medical Register

#### A NAME REMOVED

DR. H. Simmons, Allerton Grange Vale, Leeds, who carried out an abortion operation on a schoolgirl aged eighteen during 1964, was ordered to have his name erased from the Medical Register by the Disciplinary Committee of the General Medical Council on July 15. He has twenty-eight days in which to appeal.

### IRISH NEWS

#### THE REPUBLIC—

### Examination Results

#### SUCCESSES IN DEGREE COURSE

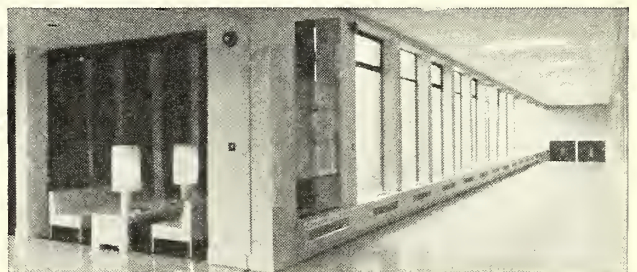
RESULTS of the second year B.Sc. (Pharm.) degree course of University

College, Dublin, are as follows: *Pass*, Olive F. Arnold; Laloo Bhagwan; J. J. Butler; Catherine Cashman; O. Corrigan; D. J. Dempsey; M. F. Flynn; Aileen M. McKenna; Jane M. T. Mahony; B. C. Maxwell; D. A. Reidy and Lye Pheng Thow. Results of the first year course are: *Pass*, L. J. Baxter; Hoosen Cassim Bayat; Helen P. Cahill; M. V. B. Carey; B. D. M. Casey; Elizabeth A. Dowling; Geraldine I. Egan; J. J. Forristal; Anne Garaghy; J. G. Houlihan; Evelyn V. Hurson; F. P. Kelly; Mary G. McHugh; J. J. O'Hare; T. N. Okakwu; R. J. O'Rourke; O. F. Reynolds; Mary J. Roice; E. N. Ryan; N. R. Thom; Marie T. Walshe; Catherine A. M. Ward; Mary E. Whiskey.

### Drug Safety

#### ADVISORY COMMITTEE SET UP

THE outgoing Minister for Health (Mr. O'Malley) on July 12 announced the appointment of an advisory committee on drug safety. The Committee will advise the Minister on the precautions or restrictions subject to which drugs may be allowed to be introduced, marketed or continued in use in the Republic. The Minister may also seek the advice of the committee on a wide variety of other matters concerning drugs. The new body is to arrange for doctors to report any adverse effects of drugs they may notice in their practice and, after assessing the reports, will pass them on to the World Health Organisation. In turn, W.H.O. will keep the Irish body notified of adverse effects reported to it by other national agencies so that they may be passed on to Irish medical practitioners. Professor R. F. Timoney (dean of the College of Pharmacy) has been appointed a member of the committee. Irish pharmaceutical circles are reported pleased at the Minister's announcement.



**NEW FACTORY IN NEW TOWN:** Exterior and entrance hall of a new factory erected for Yardley of London, Ltd., on a 19-acre site at Basildon New Town Industrial Estate by Taylor Woodrow Construction, Ltd. Production, warehouse and administration buildings have been constructed as the first phase of a long-term development programme.



# Safety of Drugs

## COMMITTEE'S ANNUAL REPORT

WHILST the Committee on Safety of Drugs has not been helped in any way by its lack of statutory powers, its members believe that the arrangements for carrying out their responsibilities for the safety of drugs should be given permanency within the framework of legislation. That attitude is put forward in the Committee's report for 1965 (H.M. Stationery Office, price 1s. 9d.). The Committee welcomed the assurance of the Minister of Health that the aim, under the new comprehensive legislation on drugs, would be to maintain the 'scope for flexibility and the exercise of professional responsibility' which the Committee's experience has shown to be necessary.

In its report the Committee deals at some length with the problems of over-the-counter remedies. It points out that drugs sold direct to the public without medical prescription may be used as occasional remedies by most people without undue risk. It considers, however, that the public should be made increasingly aware that no effective drug is entirely without hazard, and doctors should bear in mind that drug-induced illness may be the result of self-medication by the patient. The monitoring of over-the-counter remedies presents peculiar difficulties to the Committee. One such difficulty is that reactions would be reported by doctors only if they were aware that the patient had been treating himself. The incident of such reactions, too, was more difficult to calculate than the incidence of reactions to drugs on prescription, because estimates of the consumption of the drugs involved were less reliable. The report refers to the hazards observed after excessive doses of phenacetin over long periods. No special action is thought to be called for but the Committee welcomed a statement by the Pharmaceutical Society of Great Britain advising retail pharmacists to be ready to give advice to people who bought products containing phenacetin. In general the Committee recognised the valuable help which pharmacists could give in ensuring the acceptable risk to the patient.

### Inconsistent

The suggestion is made that there should be a change in the convention whereby a pharmacist includes the name of the medicine on containers of prescribed medicines only when specifically directed to do so by the prescribing doctor. Members of the Committee believe that any suggestion that patients should be kept in ignorance of their treatment is inconsistent with contemporary medical thought, though the Committee realised that there were occasions when it might be undesirable for patients to know what was being prescribed. On such occasions they consider a doctor could give clear indications when writing the prescription.

1965 was the second year in which the Committee had carried out its full range of duties, and a year in which

the Committee and the industry were able to benefit by lessons previously learned.

Information about submissions received by the Committee during 1964 has already been given (*C. & D.*, July 15, p. 50). The majority of submissions concerned reformulations or mixtures of established drugs. Sixty-nine entirely new drug substances were submitted. A considerable improvement was noted in the standard and presentation of data submitted by the pharmaceutical industry. Submissions for new drug substances were normally dealt with within three months, and submissions for reformulations within one. The report states that inevitably there were occasions on which an applicant disagreed with the views of the Committee, but the secretariat, on behalf of the Committee, gave applicants every opportunity to discuss their objections, and disagreements were usually resolved with goodwill. It was unnecessary to report to the Health Ministers any cases of a drug being marketed or put to clinical trials without the Committee's agreement.

### Difficulties that Cause Delay

A number of difficulties, however, caused delays. On several occasions, for example, when the results of some further investigation were requested, it appeared that the relevant information was available, or that the relevant tests were in progress but had not been completed. The Committee was concerned that, although the manufacturers were aware that the relevant tests were necessary, they had not thought fit to report the results with the original submissions.

During the first half of the year it was clear that some submissions on reformulations and mixtures of established drugs were being made prematurely. After representations to the manufacturers' associations the number of such cases 'declined markedly.'

On a few occasions manufacturers too readily assumed that no additional hazard was incurred by mixing established drugs together. Similar assumptions were sometimes made regarding the innocuous nature of excipients. In those circumstances decisions on the products concerned were deferred pending receipt of evidence that they could be regarded as safe. In some cases the manufacturers withdrew their proposals.

During 1965 the Committee was consulted about an increasing number of drugs at the pre-clinical trial stage and during the year 168 out of 874 submissions related to applications for approval to go forward to clinical trial, against only sixty-six out of 600 in 1964.

Manufacturers often asked for a precise definition of the toxicity tests that were regarded as necessary before the Committee could agree to a drug proceeding to clinical trials. No comprehensive answer to that question was possible. Quantity of work could be no

substitute for quality, and it was impossible to predict, for an individual drug, what work would prove necessary. The responsibility for the testing of a drug must rest firmly on the manufacturer.

For a similar reason the Committee did not give advice on the design and conduct of clinical trials, the responsibility for which was shared by the manufacturer and the clinicians taking part. The Committee did, however, exert considerable influence on trials carried out in the U.K., since a submission that did not contain sufficient clinical evidence to establish the safety of the drug in relation to its efficacy was referred back to the manufacturer as not having been adequately investigated.

There had been occasions when manufacturers had challenged the right of the Committee under their terms of reference to require evidence of the efficacy of a drug. 'The Committee, however, must consistently consider efficacy in relation to safety. If a drug likely to be ineffective is recommended for the treatment of a serious illness for which there is already a satisfactory treatment, this constitutes an unacceptable risk to the patient.'

Members of the Committee were convinced of the importance of identifying drugs by approved names, and would not consider an application by a manufacturer to market a new substance unless the applicant gave an assurance that an approved name had been obtained or applied for.

During the year 4,000 reports of suspected adverse reactions to drugs were submitted, 70 per cent. coming from general medical practitioners and the majority of the remainder from consultants or hospital junior medical staff acting on their behalf. In addition there was a small but valuable contribution from dental surgeons, from medical officers of health, and from the pharmaceutical industry.

Reference is also made in the report to the hospital drug-monitoring scheme, in which about 200 of the larger hospitals are now taking part. The report states that the Committee was well aware of the additional burden the scheme placed on busy hospital pharmacists, and was most grateful to the participants.

### Society's View

Commenting on The Dunlop Committee's argument in favour of labelling of prescribed medicines, the Pharmaceutical Society of Great Britain pointed out that whether a medicine should be labelled with its constituents was a matter for the prescriber. The British National Formulary, 1966 described a simple procedure for the labelling of medicines that the Society believed was sounder than that recommended by the Dunlop Committee which unlike the committee responsible for the formulary was not directly concerned with prescribing.



## NEWS IN BRIEF

LORD Tweedsmuir has been elected *Vice-president* of the British Rheumatism and Arthritis Association.

THE regional office for Europe of the World Health Organisation is staging a symposium on virus diseases control in Moscow, July 19-23.

A FIRE at the premises of Organon Laboratories, Ltd., Newhouse Industrial Estate, Motherwell, Lanarkshire, recently destroyed the quality-control and chemical research and development laboratories. Production was not affected.

DURING the British Pharmaceutical Conference meeting at Manchester in September the National Association of Women Pharmacists is holding a sherry evening at Owens Park, 293 Wilmslow Road, Manchester, 14, at 9 p.m. on September 7.

THE mayor of Camden (Councillor O. P. O'Connor) made a tour of inspection of the Pharmaceutical Society's Bloomsbury Square headquarters on July 11 under the guidance of Dr. J. C. Parkinson (deputy secretary) and other staff members.

THE Minister of Health is one of the contributors to 'Women at Risk', a programme in the B.B.C. Home Service on August 17, which examines the cervical smear test, explains what it is and investigates the reasons why it is not available to every woman in the country.

"FIRST Aid in Factories," a new safety, health and welfare booklet published by the Ministry of Labour (H.M. Stationery Office, price 1s. 3d.) is designed to help factory managements to establish and maintain efficient first-aid services. It gives details of the first-aid arrangements required by the Factories Act, 1961.

THE annual report of the Agricultural Research Council's pest infestation laboratory (H.M. Stationery Office, price 7s. 6d.) summarises work at the laboratory in 1965. Experimental results with a large number of new and existing insecticides, synergists and fumigants are given, together with information on research into insect biology and the biochemistry of insecticidal activity.

THE Science Research Council has made an award of £20,488 to set up a fluidisation research group in the Ramsay chemical engineering laboratories, University College, London, under the direction of Professor P. N. Rowe. The grant is for three years and studies will be concerned mainly with gas-fluidised particles in which bubble formation occurs.

"THE use of Radioactive Materials in the Study of Lung Function," is the first of a series of monographs on the use of radioisotopes in medical diagnosis to be published by the Radiochemical Centre, Amersham, Bucks. Future monographs will review counting techniques for medical purposes and the rôle of radioactive materials in thyroid evaluation, blood volume measurement, lipid metabolism studies, etc. The series is intended to provide a helpful *résumé* of current techniques.

## TOPICAL REFLECTIONS

By Xrayser

*An Event*

I dispensed a prescription the other day that presented several unique features. Its writer was obviously a man of discernment, careful in his habits, neat, tidy and clean, concerned with the safety and welfare of his patients, considerate of others, and not unmindful of the facts that the finances of the country require careful husbanding. He was, one might judge, not a young man, nor was he, one might gather, old. All of that could be surmised from the appearance of the piece of paper on which he had written his prescription. (One felt instinctively that, if the choice of paper had been his, he would have preferred to use a sheet of rather better quality than that bearing the mystic symbol "EC10", but within the limits imposed on him his performance was greatly to his credit.) The first thing that took the eye was that he had taken the trouble to read the official form at some time in his career, and had observed the enjoinder to give the name and address in block capitals. In his particular case the need for obedience was not imperative, for each letter of every word of his handwriting was cleanly formed. He was, therefore, as has been said, careful in his habits, and clearly neat, tidy and clean. The two prescriptions on the form required no deciphering, and to clinch the matter he had appended the name of the manufacturer of each product, providing perhaps unnecessarily the clue that always seems to be absent in the case of those whose handwriting bears a curious resemblance to the recordings of a seismograph in moments of terrestrial upheaval. In doing so, our present prescriber shows consideration for the pharmacist as well as concern for the safety and welfare of his patient — a fact that is emphasised by his giving clear instructions for the use of the drugs, so that the label bears not only the dose and time of taking but some indication of the purpose for which the medicines have been prescribed — "For headache," or "For sleep." But what, you may ask, leads me to suppose that he is neither young nor old? I think I might leave just a little to the imagination.

*Illegible Prescriptions*

The report of the July meeting of Council of the Pharmaceutical Society (p. 63) shows that not all physicians are in the category of that paragon mentioned in the preceding paragraph. Complaints were made of prescriptions that were incomplete and/or illegible, and members of Council were asked to make available to the office copies of prescriptions meriting that description. Evidence of that kind should not be difficult to acquire, for we are beset with examples of such time-consuming irritation daily. Mr. Tristram is reported as saying that the handwriting of doctors had always been treated as a joke, but it is a joke that has gone sour. As Mr. Tristram pointed out, similarity of names could lead to serious error, and no pharmacist should be put in the position of having to guess the answer. Nor should he be put to the trouble of having to ask — politely, if he can — what the scrawl is intended to represent. I am glad to see that it is the intention of Council to pursue the matter, but meanwhile the individual pharmacist might draw the attention of his local Executive Council to those who persistently offend. There is no excuse for such dangerous and anti-social behaviour.

*First Steps*

It seems that the long-threatened move from Bloomsbury Square is now to be regarded as "impending." Those of us of more mature years have perhaps been inclined to regard the matter as coming into the same category as the adoption of the metric system; namely that both would happen some day, but that we were unlikely to see the advent of either. The new location may well fill the mind of Mr. J. B. Grosset with fresh misgiving in the matter of loose-leaf minute books, for the refreshing breezes of the river may present even greater hazards than are experienced in Bloomsbury Square. The recovery of loose sheets from the Thames might call for a new committee. Might I suggest that it should be called the Committee of Amphibious Archivists?



## IN PARLIAMENT

BY A MEMBER OF THE PRESS GALLERY, HOUSE OF COMMONS

IN the House of Lords LORD FRASER OF LONSDALE on July 12 asked if the Government would 'take steps to ensure that all drugs when sold or dispensed be marked on the bottle or container with the name [of the preparation], whether to be applied externally or taken internally, and dosage.'

LORD CHAMPION replied that legislation would be necessary for such a proposal and added 'The extent to which it is desirable to alter the existing law relating to the labelling of drugs is under consideration in the course of the Government's review of medicines legislation, but the Government's present view is that alteration of the current convention relating to the labelling of dispensed medicines is a matter on which it is most appropriate for the medical and pharmaceutical professions to agree among themselves. Both are currently considering the problems involved. It is highly unlikely that a preparation would be offered for counter-sale to the public without an indication of its purpose and dosage.'

LORD FRASER then asked if he was aware that in almost every medicine cupboard in the 'and, and no doubt, in his and mine, there are medicines which are unidentifiable? It is not known whether they are for the head, the stomach or the chest. This is very dangerous. Moreover, is the noble Lord aware of this anomaly: that all medicines have to be labelled under an Act, the only secret remedies are those prescribed by doctors.'

LORD CHAMPION said he believed that already there was a certain degree of support within the medical profession for the desirability of giving information. All doctors agreed that there would be instances where it would not be appropriate for the patient to know the name of the prescribed drug, but 'many doctors, particularly the younger and less conservative, believe that the rule on naming should be the converse of that currently promulgated in the British National Formulary and that pharmacies should name the drug unless the doctor has instructed to the contrary.'

LADY EMMET: I think it would be helpful if every prescribed medicine had a limit of time on it; that would help to have cupboards cleared after a period.

LADY SUMMERSKILL asked when the report on labelling and prescribing, which he had just mentioned, would be made, to which LORD CHAMPION replied: 'I cannot give a date for that, but we recognise its importance and it will be done as soon as possible.'

### Resale of Postage Stamps

In a written answer on July 13 MR. JOSEPH SLATER (Postmaster General), informed MR. P. MILLS that when licences for postage stamp sales were abolished, shopkeepers wishing to buy stamps for resale would be able to obtain them at any post office.

### Farm and Garden Chemicals

MRS. J. BUTLER, on July 13, sought leave to bring in a Bill to make provision for the labelling of farm and garden chemicals. The Bill which was read the first time, is due for its second reading on July 29.

### Finance Bill — Third Reading

With adjustments to ease the operation of corporation tax and other final Government amendments, the Finance Bill completed its report stage before the Commons rose early on July 14. MR. JOHN DIAMOND (Chief Secretary, Treasury), gave assurances that the Government would include in its review of possible changes methods whereby tax relief might be given to patent royalties on inventions. That would be of particular benefit to close companies.

### Domestic Chemical Products.

MR. GWILYM ROBERTS asked the President of the Board of Trade on July 14 if, in view of possible dangers to the public from products such as aerosol oven cleaners, he would introduce legislation to provide for the compulsory medical testing of domestic chemical products. MR. ROY JENKINS (Home Secretary) pointed out that where necessary, action to deal with any such dangers could be taken under the Pharmacy and Poisons Act, 1933 or the Consumer Protection Act, 1961. He was not convinced that further legislation was needed.

### Hearing Aids

MR. HECTOR HUGHES asked the Minister of Health on July 18 if he was aware of the high prices charged by commercial firms for hearing aids and if he would set up an inquiry with a view to securing a reduction in such prices. MR. KENNETH ROBINSON (Minister of Health) said 'No such inquiry is necessary since Medresco hearing aids are already available without charge under the National Health Service to all who need them.'

### Drug Peddling in Scotland

MR. W. ROSS (Secretary of State, Scotland) in a written answer to MR. W. SMALL on July 12 said that the number of persons proceeded against in Scotland in 1964 and 1965 for contraventions of the Dangerous Drugs Acts were twenty-nine and sixteen respectively. Average period of detention of those sentenced was just over six months. The average fine imposed was about £30.

### Purchase Tax Collection

Dr. Winstanley, on July 12, asked the Chancellor of the Exchequer if he would revise the purchase tax arrangements for small firms. MR. NIALL MACDERMOTT (Financial Secretary, Treasury), replied: No. The present arrangements gave them an average period of credit of 2½ months for payment of the tax, a fair balance between the trade and the Exchequer.

### Chemicals in Cosmetics

MRS. JOYCE BUTLER sought leave on July 19 to introduce the Labelling of Food Bill to make provision for the labelling of food and toilet preparations and the display of notices relating to food. The Bill prescribed that no person should sell any food or confectionery that contained additives except when their presence was disclosed. She claimed that unless there were labelling requirements of a general application to cosmetics some cosmetics might constitute a hazard. Of particular concern was the colouring used. Considerable amounts of colouring were embodied in lipsticks. Even if the package was small, it was just as easy to print the name of the chemical colouring as it was to print such names as "Tempting Touch." Leave was given and the Bill read a first time.

## LEGAL REPORTS

### Restraining Order Granted

Mr. Justice Plowman, in the Chancery division of the High Court, London, on July 15, granted, by consent, an order to Addis, Ltd., Hertford, restraining Mr. R. H. Maskell, Forest Gate, London, E.7, from selling Addis products, exempt under the Resale Prices Act, at cut prices in breach of a price maintenance condition.

### Tetracycline Appeal Withdrawn

In the Patents Appeal Tribunal on July 18, D.D.S.A. Pharmaceuticals, Ltd., Crawford Street, London, W.1, were granted leave to withdraw their appeal from the refusal of the Comptroller of Patents to grant them a compulsory licence under the basic tetracycline patent No. 747779 held by the Pfizer organisation. In consequence, Messrs. Pfizer's cross notice of appeal was, by leave, withdrawn. Consideration of Pfizer's applications for costs was adjourned by the tribunal, which instructed its registrar to ascertain whether the Comptroller of Patents, who had not dealt in his decision with the cost of the original hearing, would agree that the tribunal should now deal with the costs of the whole proceedings, including the costs of the original hearing.

### Infringement Action Held Over

IN the Chancery Division of the High Court, on July 15, an application by Eli Lilly & Co., Indianapolis, U.S.A., for an interlocutory injunction against D.D.S.A. Pharmaceuticals, Ltd., Crawford Street, London, W.1, to restrain alleged infringement of the plaintiffs' erythromycin patent, was adjourned until October 4 by Mr. Justice Lloyd-Jacob. The court was told that defendants did not contest the validity of the patent, but the question arose whether tablets sold by the defendants emanated from the plaintiffs or their licensees.

Mr. Peter Ford, for D.D.S.A. Pharmaceuticals, said his clients contended that all the purchases of that particular drug they had ever made had been from the plaintiffs' licensed sources.

Defendants had been selling the



material for about eighteen months. Mr. Ford alleged that the present proceedings were launched "precipitately and without warning," without drawing attention to the patent.

His instructing solicitors had written to the other side denying that defendants were wrongdoers and stating that the application would be opposed.

The sources of the material were American and it was necessary to obtain affidavit evidence from the U.S. For the American company, Mr. A. Turner said the patent, published in April 1954, had had general respect throughout the world. His clients were unaware of the sales in question until May 28. "Defendants have a method of trading known to the plaintiffs which does not encourage them to give warning before they bring an action of this nature," said Mr. Turner. The judge adjourned the hearing on the defendants' undertakings to keep an account in the interim and to file evidence within fourteen days.

### Patent Appeal Dismissed

THE Queen's Bench Divisional Court, London, on July 15 refused Smith, Kline & French Laboratories, Philadelphia, U.S.A., and their British licensees, Smith, Kline & French Laboratories, Ltd., Welwyn Garden City, Herts, an order quashing part of a decision of the Patents Appeals Tribunal on May 10, 1965. Lord Parker (the Lord Chief Justice), sitting with Mr. Justice Fen-

ton Atkinson and Mr. Justice James, said the tribunal had held that a certain ground of opposition to the granting of a compulsory licence to Biorex Laboratories, Ltd., Exmouth Market, London, E.C.2, in respect of the drug trifluoperazine could not be held as a good reason for refusing the licence. Smith, Kline & French, who owned the patent concerning the manufacture of the drug, argued, said Lord Parker, that the tribunal was wrong in law in that finding and that it should be quashed. The drug was an "ethical" drug that could not be obtained without a doctor's prescription and was used in cases of depression. Messrs. Smith, Kline & French sought to allege that Messrs. Biorex had held out that their managing director was a doctor when, they claimed, he was not. For his part, said Lord Parker, he thought the tribunal was wrong in saying that the ground of opposition was summarily setting out the facts supporting another ground of opposition. It seemed to him that it was plainly intended to be an additional ground. He was not, however, prepared to say that it was a case where an order of *certiorari* should be granted. There were a number of grounds on which it would be wrong to exercise the court's discretion in the appellants' favour. Mr. Justice Fenton Atkinson and Mr. Justice James agreed and the appeal was dismissed, Messrs. Smith, Kline & French being ordered to pay costs of Biorex, Ltd.

July 14 that sales had doubled and gross profitability and dividends had risen more than 3.7 times since 1956. Home sales in the first quarter of the current year had risen by 8½ per cent. He added: 'sales are buoyant and they have continued buoyant right up to today but there are difficult times ahead. Deflation is increasing. Prices and costs of all kinds are rising fast.'

### BUSINESS CHANGES

ABDINE LTD., is the new trading title adopted by Duncan McGlashan, Ltd., Westfield Road, Edinburgh, 11.

MR. W. R. SANDISON, M.P.S., has retired from business and the pharmacy at 330 Brandon Street, Motherwell, has closed down.

THE dispensing side of the business of Seymour (Chemist), Ltd., 5 Cornmarket, High Wycombe, Bucks, has been transferred to 7 High Street, where Mr. M. E. Seymour, M.P.S., trades as J. M. Hughes.

### Appointments

UNITED GLASS (ENGLAND), LTD., Kingston Road, Staines, Middlesex, have appointed Mr. W. E. Saunders their field sales manager in the Birmingham area.

THE BRITISH DRUG HOUSES, LTD., have appointed Mr. H. E. Davies personnel manager of their laboratory chemicals division at Poole. Mr. Davies succeeds Mr. W. B. Brewer, who retires on July 29.

## COMPANY NEWS

### Last year's figures in parenthesis

GNOME PHOTOGRAPHIC PRODUCTS, LTD.—Recommended dividend for year ended May 31 is 26½ per cent. (25 per cent.). Profits are £165,317 (£145,341) and after tax of £68,415 (£56,612) net profit is £96,902 (£88,729).

COLEMAN & CO., LTD.—Of 1965 net sales (see C. & D., June 11, p.581), wines contributed 66.8 per cent., food beverages 12.1 per cent., dentifrices 6.4 per cent. and retail subsidiaries 14.6 per cent. Sales this year 'continue to show a marked increase.

SAVORY & MOORE, LTD.—Mr. R. W. V. Neathercoat will cease to be a joint managing director from August 1, but will continue in the post of chairman. The other joint managing director (Mr. J. R. M. Tulloch), will become sole managing director from the same date.

DISTILLERS CO. LTD.—Trading profit for year ended March 31, before depreciation £42.8 million (£43.6m.). Profit before taxation, £50.2m. (44.4m.). Taxation, £19.4m. (£22.5m.). A final dividend of 4½ per cent. is recommended making 11 per cent. for the year (last year the equivalent of 10.5/12ths per cent.).

BERK, LTD.—The company have acquired all the share capital of Vitax, Ltd., Ormskirk, Lancs, from Reckitt & Sons, Ltd., and others. Acquisition is by exchange of shares and involves the issue of 122,086 Berk Ordinary shares. The company, holders of the Royal Warrant for fertilisers and insecticides, will continue to trade under the Vitax name.

BEECHAM GROUP, LTD.—A group of European underwriters have signed an underwriting agreement for a \$15-million convertible debenture issue of Beecham International Holdings, S.A. (the wholly-owned Luxembourg subsidiary of Beecham Group, Ltd.). The debentures are expected to be issued at par, to bear interest at 5½ per cent. and to be convertible into shares of Beecham Group, Ltd., at 32s. per 5s. Ordinary share.

BOOTS PURE DRUG CO., LTD.—The chairman (Mr. Willoughby Norman), said at the annual meeting on

### PERSONALITIES

MR. F. S. LEAPER, who recently retired after thirty years at his pharmacy in Rownhams Road, Maybush, Southampton, was paid a remarkable tribute by his customers when he closed his premises for the last time. He found sixty of them waiting to wish him goodbye and to thank him for all he had done for them. They gave him a silver tray, inscribed 'With love from your Maybush friends — 1934-1966,' and Mrs. Leaper was handed a bouquet by an eight-year-old daughter of one of the party. Of Mr. Leaper, it was said, 'He was not our chemist



**SURPRISE FOR RETIRING PHARMACIST:** When he closed his Southampton pharmacy for the last time before retiring, Mr. F. S. Leaper found many of his customers waiting to mark the occasion with a gift. He is seen here with Mrs. Leaper receiving a silver tray. (see above).

[Photo courtesy Southern Evening Echo.]



alone, but our friend and adviser . . . We are losing a very good friend.' Mr. Leaper told THE CHEMIST AND DRUGGIST that he had been busy checking up the accounts and prescriptions that evening in preparation for the hand-over to the new proprietor. Not until he stepped out of the door was he aware that anything out of the ordinary was about to take place. He added that, although the neighbourhood had grown considerably since he opened on his own account, he had been fortunate in being able to maintain a personal relationship with his customers. Taking an active part in local pharmaceutical affairs had also enabled him to make a wider circle of friends. Mr. Leaper hopes in his retirement to 'do an occasional locum job' and so maintain contact.

**MR. JOHN SALMON GILBERT**, M.P.S., resigned recently as chairman of Swansea Executive Council. Mr. Gilbert qualified in 1912 and was in business during the whole period of operation of National Health Insurance. He was appointed a member of the Executive Council in 1947 and became chairman in 1958.

## MARRIAGES

**COULSON — PAGE.** — At Barton, Cambridge, recently, Patrick Neal Coulson, M.P.S., 89 Cherry Hinton Road, Cambridge, to Anne Pell-Coggins Page, M.P.S., Westacre, Haslingfield Road, Barton.

## DEATHS

**BACHARACH.**—On July 17 Mr. Alfred Louis Bacharach, M.A., F.R.I.C., for many years the executive scientific officer of Glaxo Laboratories, Ltd., Greenford, Middlesex. Mr. Bacharach entered industry as a member of the staff of the Wellcome Chemical Research Laboratory, where he remained from 1915 to 1918, and afterwards spent a year at the Wellcome Chemical Works. Soon after the end of the 1914-18 war he joined Joseph Nathan & Co., Ltd., which subsequently became Glaxo Laboratories, Ltd., and was associated with the company until 1956. Mr. Bacharach played a notable part in the early work on the isolation of vitamin DS and the synthesis of vitamin D. He was a former vice-president of the Royal Institute of Chemistry and of the Society of Chemical Industry. He was the author of "Science and Nutrition."

**BARNES.**—On June 24, Mrs. Elsie Barnes, M.P.S., 1 Tavis Road, Paignton, Devon. Mrs. Barnes qualified in 1929.

**BYRNE.** — At 13 Queen Street, Warrenpoint, co. Down, Northern Ireland, on July 5, Mr. Charles Edward Byrne, M.P.S.N.I. Mr. Byrne qualified in 1958.

**CATTRAN.**—On July 11, Mr. James Henry Cattran, M.P.S., 12 Penryn Street, Redruth, Cornwall, aged 59 Mr. Cattran qualified in 1929 and had been in business in Redruth for more than thirty years.

**COWLEY.**—Recently, Miss Annie Winifred Cowley, M.P.S., Grenaby, Highcroft Avenue, Bray Hill, Douglas, Isle of Man. Miss Cowley qualified in 1930.

**DE HEVESY.**—On July 5, Professor George de Hevesy, aged eighty. Professor de Hevesy, who was awarded the Nobel Prize for Chemistry in 1943, was a pioneer in the use of radioactive isotopes as tracers or indicators.

**GRAHAM.**—Suddenly on July 10, Mr. William Thomas Graham, M.P.S., Salendi, Thursby Road, Elstead, nr. Godalming, Surrey, aged eighty-four. Mr. Graham qualified in 1906 and was formerly in business in East Ham, London.

**HARRISON.**—Recently Miss Margaret Eveline Harrison, M.P.S., 63 Norman Road Saltford, near Bristol. Miss Harrison qualified in 1922.

**LEMON.**—On July 7, Mr. Reginald Allin Lemon, M.P.S., Flat 12, Eileen Beard House, Barton Road, West Leigh, Havant, Hants. Mr. Lemon qualified in 1921.

**MCCABE.**—On July 1, Mr. Thomas Joseph McCabe. Mr. McCabe who qualified as a pharmacist in 1928 conducted a pharmacy in St. George's, Dun Laoghaire, Eire, for many years, disposing of it to Miss C. Tobin about seven years ago when he retired and took up residence in Liverpool.

**MACLEAN.**—At The Gables, Appleton, Abingdon, Berks (the home of his son), on July 6, after a long illness, Mr. Alexander MacLean, M.P.S., aged seventy-two. Mr. MacLean formerly resided at 14 Sorbie Road, Ardrossan and was in business at 19 Dockhead Street, Saltcoats, Ayrshire.

**MARKS.**—On June 20, Mr. Frederick Hubert Benjamin Marks, M.P.S., 36 Hill Road, Clevedon Somerset. Mr. Marks qualified in 1922.

**PAINE.**—On June 28, Mr. Eric Charles Paine, M.P.S., 82 Bartholomew Street, Newbury, Berks. Mr. Paine qualified in 1921.

**SPRIGINGS.**—On June 21, Mr. Walter Thomas Sprigings, F.P.S., 27 Trafalgar Road, Wallasey, Ches. Mr. Sprigings qualified in 1913.

**TORRANCE.**—On May 31, Mr. Donald Buchanan Torrance, M.P.S., Bramshall Road, Uttoxeter, Staffs. Mr. Torrance qualified in 1919.

**WETTON.** — On June 6, Mr. Edgar John Wetton, M.P.S., 2 Norfolk Street, Brighton, Sussex. Mr. Wetton qualified in 1927.

**LONG - SERVICE AWARDS:** Three long-service employees of Nicholas Products, Ltd., Slough, Bucks, were entertained to lunch with the board, followed by a presentation of gifts from the company. They were W. G. Butler (37 years' service), Miss J. Macfarlane (21 years) and Mr. E. W. Sales (17 years). In the picture they are at left. To their right are Messrs. Maurice Nicholas (chairman, Aspro-Nicholas Group), Robin Rigby, M.C. (managing director, Nicholas Products, Ltd.) and J. W. Jamison (chairman, Nicholas Products, Ltd., and a member of the Group Board).



**WILL.**—On June 13, Mr. George Will, M.P.S., 6 Hylands Parade, Wood Street, Chelmsford, Essex. Mr. Will qualified in 1922.

**ZEAL.**—On June 19, Mr. Herbert Henry Zeal, aged 78. Mr. Zeal was president of G. H. Zeal, Ltd., thermometer manufacturers, Lombard Road, London, S.W.19. He started work with his father (Giles Henry Zeal) at the age of fourteen and trained as a clinical thermometer graduator at 82 Turnmill Street, London, E.C.1. When his father's business was formed into a limited company, in 1921, Mr. Zeal became a director. At the time of his death he was also president of Whitefriars Glass Ltd., Wealdstone, Middlesex, in which company G. H. Zeal, Ltd. acquired a controlling interest in 1951. He was a past president of the British Lampblowers' Scientific Glassware Manufacturers' Association.

It is regretted that in the CHEMIST AND DRUGGIST, July 9, reference was made to the death of Mr. Matthew Hamilton, M.P.S., 1 Castlebay Court, Largs, Ayr. The announcement should have referred to Mrs. Hamilton. Apologies are offered to Mr. Hamilton for any embarrassment that resulted from the statement.

## MAKERS' ACTIVITIES

### Pharmacists Visit Aldershot Factory.

—In order to get to know their Southampton-area customers in a different setting from the usual business contacts, Thomas Christy & Co. Ltd., North Lane, Aldershot, Hants, invited retail pharmacists and their assistants from that area to look over their factory on July 13, and later entertained them to tea. In the course of the factory tour the party saw a number of familiar products being made and packed. The flexibility of the company's production facilities was stressed. For large runs there was a fully automatic line available but because of the large range of products handled, some of which were required speedily and in relatively small batches, a considerable amount of female labour was occupied on a full-time basis. It was also explained that production fell into three groups — the company's own specialities, products made and distributed for customers and products manufactured and packed for customers who carry out their own marketing.



## NEW PRODUCTS AND PACKS

### VETERINARY SPECIALITIES

**Louping-ill Vaccine.**—Agricare Products of Pfizer, Ltd., Sandwich, Kent, have introduced a new inactivated vaccine, Louplam of louping-ill, a tick-borne disease occurring mainly in upland flocks of sheep. A 2-mil subcutaneous injection of the new vaccine is given at least two weeks before tick activity is expected on the grazings. Detailed instructions for the dosing of sheep of all categories are included with the 50-mil bottle pack. Potency of the vaccine is retained for six months under correct storage conditions, and the product is understood to have satisfied the requirements of the British Veterinary Codex (1953) challenge test.

### COSMETICS AND TOILETRIES

**Make-up and New Shades.**—To make possible a new look involving "the Innixa concept of the unmade-up appearance" Innixa Laboratories, Ltd., 43 Essex Road, London, N.1, have introduced a new tint, "Buttermilk Satin," in their "Cream Satin Foundation," "Satin Bloom" and "Liquid Satin"; and a new shade, "Soft Chinchilla," in "Dramatic Eyeliner," "Shadow Soft."

**An Innovation in Face Powders.**—Shulton (Great Britain), Ltd., 100 Brompton Road, London, S.W.3, launched what is claimed to be the "greatest single innovation in face powder development since Egyptian times," a Cornsilk face powder. As opposed to conventional face powders which are composed primarily of talc or starch, Cornsilk is understood to be an entirely new natural substance derived from the centre of the corn cob. This means that Cornsilk face powder is made with microporous cellulose with an oil absorption rate many times higher than other powders. The new-style powder is claimed to keep the shine off the nose for longer, to blend with any make-up, and to be equally flattering to the face that has no make-up at all. Entire world-wide rights in Cornsilk, which was discovered in the United States and patented by a dermatologist, who found it extremely beneficial to the skin, are held by Messrs. Shulton, who intend to develop from it a cosmetic and skin care range of preparations to be marketed under the existing Desert

Flower brand name. Cornsilk will be distributed to selected stockists for sale from the beginning of October. Other Desert Flower cosmetics are "Beauty Clear" (cleans off make-up and cleanses pores), "Beauty Ice" (a greasy astringent gel) and "Beauty Clean" (light, milky lotion).



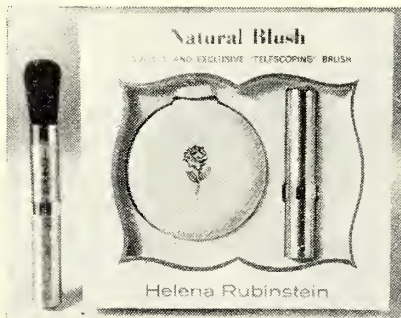
**PACKED FOR DISPLAY:** New Color-fair of Steiner Products, Ltd., 66 Grosvenor Street, London, W.1, showing how three packs may be used together to form an eye-catching point-of-sale display.

**A Glow to the Make-up.**—A new product "Natural Blush" of Helena Rubinstein, Ltd., 3 Grafton Street, London, W.1, is described as a "Soft, gentle colour that brings a glow to your make-up." A fine powder, it is

veronese, acier); and a roll-on mascara in four shades (black, brown, blue and veronese).

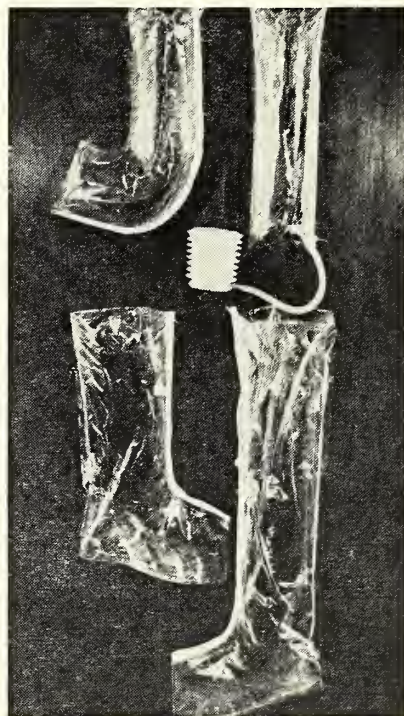
### SUNDRIES

**Pneumatic Splints.**—Woolley & Arnfield, Brinksway Road, Stockport, Ches, and Bradley & Bliss, Kings Road, Reading, Berks (both branches of Vestric, Ltd.), are marketing Medic-Air splints manufactured by Safety Pro-



available in three shades and is applied with a special "telescoping" brush. The shades are "Blush Pink" (a "soft, true" pink); "Blush Peach" (a warm, soft, natural peach with just a hint of coral); and "Blush Amber" (a tawny).

**Eye Cosmetics.**—Orlane of Paris (distributors: Sirex, Ltd., Spirella House, Oxford Circus, London, W.1, are introducing a new range of powdered eye shadow in four shades (blue,



ducts, Ltd., Holmethorpe Avenue, Redhill, Surrey. The splints are emergency pneumatic splints of new design constructed of double-walled transparent plastic tube. They are inflatable, being fitted with non-return valves, and the zip fasteners make for easy application.





## TRADE NOTES

**Sole U.K. Distributors.**—Practical Pharmaceuticals, Ltd., 50 Jesmond Road, Newcastle upon Tyne, 2, have been appointed sole United Kingdom distributors for K2r stain lifter.

**"Mini" Perfume Atomiser.**—Jackel & Co. Ltd., 56 Wigmore Street, London, W.1, offer a gilt "mini" perfume atomiser with travel case in black or red. The atomiser is claimed leakproof and fully guaranteed.

**New Arrangements for Distribution.**—Rona Laboratories, Ltd., Rona House, Molyneux Street, London, W.1, are manufacturing and distributing Hepacort-plus cream and suppositories from August 1. Packs and prices remain as at present.

**Change of Product Name.**—Macarthy's, Ltd., Chesham House, Romford, Essex, announce that Anaprel, of which they have been distributors for Selpharm, Ltd., is now known as Anaprel 500. Packs and prices are unchanged.

**New Prices.**—Bayer Products Co., 2 St. Mark's Hill, Surbiton, Surrey, announce (but too late for mention in the Cumulative Price Changes supplement) that Lenium sachet is now priced at 1s. 2d. retail and Paradol tablets (50) at 7s. 6d.

**Approved.**—The British Electrical Approvals Board, Mark House, 153 London Road, Kingston upon Thames, Surrey, has given its approval to the Cumfee SP and DP electric blankets of Electrowarm Ltd., and the Witney Spinney electric blankets of International Import and Export Co., Ltd.

**For Dogs and Cats.**—Strenol Products, Ltd., 240 Earls Court Road, London, S.W.5, draw attention to their Strenol skin cream for eczema, cuts, sore spots, minor wounds and burns, etc., in dogs and cats; and to their Otodex ear drops, now in refillable "squeeze" applicator, for ear irritation and canker.

**Schedule of Resumed Production.**—Thermos, Ltd., Ongar Road, Brentwood, Essex, have issued a list of vacuum container models they will be producing in the near future, with the date alongside each model when production is expected to recommence after the recent fire (see *C. & D.*, July 9, p. 25). Production of model 17 starts July 29 (delivery delay for new orders: six weeks); 14½F, August 12 (eight weeks); 14F, August 12 (nine weeks); 1414F, August 12 (twelve weeks); 14QF, August 19 (eight weeks).

**Changes and Withdrawals.**—Pfizer, Ltd., Sandwich, Kent, announce that Terramycin troches are now discontinued and no further supplies are available. To assist identification all of the company's tablet and capsule formulations are being marked with PFIZER in an oval. In addition all uncoated tablets will bear on the reverse three letters from the name of the preparation together with the strength: e.g. DIA/100 will indicate Dichinese tablets 100 mgm. Both strengths of Envacar tablets are now primrose in colour instead of white. In addition

they are being marked ENV/10 or ENV/40 according to strength and will be packed in bottles of 100 and 500 tablets.

**Formulation Changes.**—A. Wander, Ltd., 42 Upper Grosvenor Street, London, W.1, have made changes in the formulation of their Triogesic tablets and elixir. From August 1 the formulas of new packs will be: Triogesic tablets, 12.5 mgm. of phenylpropanolamine and 500 mgm. of paracetamol per tablet; Triogesic elixir, 3 mgm. of phenylpropanolamine and 125 mgm. of paracetamol in each 5 mls. There is no change in the recommended dose. Packs and prices are the same but purchase tax is chargeable at 25 per cent. for the time being. The antihistamines, mepyramine and pheniramine maleate are omitted because the manufacturers consider that these substances do not enhance the clinical value of Triogesic in the indications for which its use is recommended. Triogesic is indicated for the relief of pain and congestion resulting from complications of the common cold such as acute sinusitis, otitis media and Eustachian catarrh.

**Reformulated and Reintroduced.**—Cox-Continental, Ltd., 85 Church Road, Hove, 3, Sussex, have reintroduced Ascon tablets and suspension to modified formulas. Each Ascon tablet or 5



mls of suspension contains dried aluminium hydroxide gel, B.P., 154 mgm.; magnesium trisilicate, B.P., 324 mgm.; and hyoscine hydrobromide, 0.06 mgm. [Corrected note].

### Competitions

**Prize-winners Named.**—The products manager for Radox of Nicholas Products, Ltd., Slough, Bucks, announced recently the major prize-winners in their "dealer bingo" competition. First prize went to Mr. J. H. Warnes, Merrell's, Ltd., 181 York Way, London, N.7, with 2873 words all derived from Radox Lifeguard Dip.

**Make the Most of It.**—A message from Mr. A. C. Rix (general sales manager, Beecham Toiletory Division, Brentford, Middlesex, urges stockists to maintain their Brylcreem world cup

competition displays in good order. With the growing excitement Brylcreem stockists should be prepared to benefit from heightened consumer interest in the competition, which already, he says, has stimulated consumer interest, sales being already at a record level.

**Gold Watch for Assistant.**—Winner of the first competition run by Elida, Ltd., Hesketh House, Portman Square, London, W.1, for members of their recently formed beauty club, is Miss Jane Arthur, Woking, an assistant at H. W. Herbert, Ltd., in West Byfleet, Surrey. To win the competition she had to place six hairstyles in order of merit and state why she recommends Sea Witch hair colours to her customers. Mr. Peter Whinney (area sales manager for Elida) presented Miss Arthur with her gold watch and a bouquet of Elida roses recently.

### Premium Offers

**BRONCO, LTD.,** Atlas Works, Berkshire Road, London, E.9. Electric kettle and electric iron at savings of 32s. 6d. and 25s. respectively.

**BRITANOL, LTD.,** Swinton Hall Road, Swinton, Manchester. Simbix slimmers' biscuits. Food weighing scale at saving of 17s. 5d. (in exchange for three Simbix tops).

### Trade Shows

**JEAN SORELLE, LTD.,** 76 Great Portland Street, London, W.1. Queen's hotel, Cardiff. July 25-29.

**SCOTT & BOWNE, LTD.,** 50 Upper Brook Street, London, W.1. Queen's Hotel, Cardiff. July 25-29.

### Information for Manufacturers

**Organic Iodine Chemicals.**—T. J. Sas & Son, Ltd., Victoria House, Vernon Place, London, W.C.1, are able to supply a range of over 200 organic iodine chemicals. No list is available, but quotations are submitted against specific requests.

**Television Test Panels.**—The test services division of Retail Audits, Ltd., 11 Kingsway, London, W.C.2, has established a test panel for chemists in the East Anglia television area. Other test panels are maintained in the Wales and West, Ulster, Border, Tyne-Tees, Southern and Lancashire television areas.

**Advantages in the Capsule.**—Claiming for their soft-gelatin capsules the advantages of "instant versatility, accuracy, cleanliness and convenience," R. P. Scherer, Ltd., 216 Bath Road, Slough, Bucks, offer their services in encapsulating products supplied to them or making products to specifications.

**Appointed Agents.**—Kingsley & Keith (Chemicals), Ltd., 73 Jernyn Street, London, S.W.1, were recently appointed sole distributors for the range of barbiturates, mannitol and sorbitol manufactured by A. S. Synthetic, 53 Jens Baggesens Vej., Aarhus, Denmark. A catalogue of fine chemicals — products of other European as well as United States manufacturers for which they also distribute — is available.



## Correspondence

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

### Selective Employment Tax

SIR,—In contrast to many other types of retail establishments who will, to a greater or lesser degree, be able to recoup the cost of the selective employment tax by price increases, pharmacy is singularly badly placed. The reason, of course, is that such a high percentage of the lines sold are of the branded type, heavily advertised with known and established retail prices. Pharmacy is, in effect, completely hemmed in, since the manufacturers of such lines have their own standard cost prices and no bargaining is possible in respect of them. It is therefore encouraging to learn that signs are appearing of manufacturers' awareness of this extremely difficult position together with a realisation that there are no facilities within a fixed price structure for preventing the full burden of the tax falling upon the trade — which was never, of course, its intention. One or two firms have already recognised this position and, having taken into account these factors together with the S.E.T. premium which they as manufacturers will be receiving, have made a slight reduction in their cost prices. This is of course in line with the statement of the Chancellor of the Exchequer who, in a written reply to a question in the House from Mr. Rhodes, M.P., on June 14, indicated that, in respect of consumer goods, his tax calculations had been based on the assumption that the premium payable to manufacturers would be deducted from the cost of the goods. It is to be hoped that other manufacturers will take a similarly enlightened and realistic view of the situation and, in looking at their own price structure, will take cognisance of the fact that, whilst they will be receiving a premium in respect of every employee on their books, their pharmacist colleagues are faced with an addition to their wages bill of 25s. per week (male) and 12s. 6d. per week (female) with no means, so far as this type of merchandise is concerned, of offsetting it other than through the good will of their manufacturer friends.

H. G. MOSS,  
Feltham, Middlesex

### Credit Cards

SIR,—I understand from another publication that the Council of the Pharmaceutical Society objects to credit cards because, *inter alia*, the pharmacist who subscribes to such a system is holding out an inducement to customers to patronise his pharmacy rather than another. Not all pharmacies in a given town have baby scales, thus the "forward looking pharmacist" (pardon the phrase), displaying baby scales within his pharmacy, is holding out an inducement to customers to patronise his pharmacy rather than another pharmacy without baby scales. I should be interested to learn if the Society's Council object to the "forward-looking pharmacist's" possessing baby scales. I

once held a T.S.A. Licence for the manufacture of certain antibiotic preparations. The possession of that licence was a definite inducement to customers, and even more doctors and nurses, to patronise my pharmacy rather than other pharmacies without a licence. Indeed it was a necessity for customers, doctors and nurses to patronise me for, while the nearest pharmacy was five miles away, the nearest T.S.A. licensed pharmacy was at a distance of about 25 miles. The Society's Council did not object to my holding a T.S.A. licence. Presumably today the Council would object to my applying for a T.S.A. Licence, and if I obtain one then I assume I shall expect a call to appear before the Statutory Committee and risk a fine or being struck off the register for holding out an inducement to customers, and particularly professional *clientèle*, to patronise my pharmacy rather than another. Indeed, certain potential customers would not be free to enter any pharmacy for certain products: my action of obtaining a T.S.A. licence would compel certain potential customers to patronise my pharmacy. Is it not time that the Council either withdrew its objections to credit cards or, if they wish to continue their objections, to base them on other arguments?

PROVOCATIVA

### Everything Went Wrong

SIR,—I am sure that many of your readers will sympathise with Midland Chemist (C. & D., July 16, p. 56) over his shopfitting experience. It is, of course, impossible to guarantee that the refitting of a pharmacy can be carried out exactly to a pre-arranged programme and with little or no inconvenience — what Robert Burns wrote about 'the best laid schemes of mice and men' still applies. But through the recently formed N.P.U. pharmacy planning department we aim to ensure that those N.P.U. members who seek the department's help at an early stage, are given the best possible advice so that many time-consuming and costly frustrations can be avoided. The proprietor pharmacist might be expected to be involved in a modernisation scheme two or three times during his business career. It is therefore understandable that he is not experienced to deal with all the detailed problems that must arise in the planning of such a scheme. As well as advising on layout, preparing outline drawings, recommending shopfitting contractors and giving an unbiased opinion on the comparative merits of suggested schemes and quotations, the N.P.U. department will make sure that a practicable time-table is prepared by the shopfitter chosen to carry out the scheme so that the work to be done by various sub-contractors (flooring, lighting, heating etc.) can be properly co-ordinated and all the parties informed if any changes

to the original time-table become necessary.

The existence of the department will, in our view, encourage those shopfitters introduced to members by the department to take great care to guard against any of the delays and errors which Midland chemist had to face.

J. WRIGHT, *Secretary*,  
National Pharmaceutical Union,  
London, N.14.

### A Rural Pharmacist's Viewpoint

SIR,—We have in recent weeks read of the High Court action, R. C. Dickson, M.P.S. v. The Pharmaceutical Society; and the opinions of several members. As a pharmacist in a rural area, I would like, with the Editor's permission, to express my opinions on this matter of restraint of trade. I consider that the Pharmaceutical Society have failed in leadership and action. By resorting to the minor and distasteful rôle of supervising the collection of dispensed prescriptions for analysis and accuracy, it has insulted the integrity of its own members, instead of making a stand against this system of checking. Would the British Medical Association tolerate this in its own profession? A slip at some time is hardly comparable to the £ millions that go down the drain today through strife or someone's mistakes. What action did the Society take over the revised terms offered a few years ago by Mr. Enoch Powell, a former Minister of Health? Is the Society aware of the many unpaid hours which rural pharmacists are obliged to work to ensure that patients get their medicine? The vast majority of pharmacies depend on their counter trade to provide a reasonable standard of income. Any suggestion that pharmacists should finance an appeal in the High Court against the ruling should be turned down completely. Instead, the Society should act in the defence of members by fighting for a higher professional standing in the Health Service, a corresponding rise in fees or salary; and a pension on retirement. Pharmacists should read the letter from Bryan Croft in the July edition of *Counter-scope*.

DONALD CAWDELL,  
Wainfleet Lincs

### More on the Commercials

SIR,—I wrote my letter (C. & D. June 25, p.640), calling for a ban on all television advertising of medicines, rather as a mischievous schoolboy might throw a stirring cracker into the bonfire — to stir things up a little and to see what would happen. Well, my cracker turned out to be something of a damp squib, for I also wrote privately to about thirty eminent pharmacists and only had one reply (and that one could hardly be described as another Communist Manifesto!). "You are preaching to the converted" I am told; but I am *not*



trying to convert, and the only preaching involved is to encourage pharmacists to make their views known to those in high places. I have had correspondence with the Minister of Health and with the Postmaster General on the subject and I understand that a score or more of my (non-eminent) colleagues have written to one or the other or both (though the trouble here is that letters are passed on to a civil servant to make a stock reply) but I have come to the conclusion that the secretary of the Consumer Council (3 Cornwall Terrace, London, N.W.1) is the best person to write to. The Consumer Council is a Government-sponsored body which shows remarkable common-sense, it is willing to listen to reasoned argument and its pronouncements carry some weight at Westminster. A word to the wise is sufficient . . . the pen is mightier than the pestle and a darned sight easier to write with, too!

RAYMOND HUTCHINSON,  
London, S.E.7

### Congratulations to Mr. Dickson

SIR,—As a private independent chemist for over thirty years I extend hearty congratulations to Mr. R. C. M. Dickson for winning the High Court action against the Society. Mr. Dickson is fighting for a principle which, I would suggest, is just as important to individuals as to company chemists. The Society's resolution can only do harm to the progressive businessman and can do no good whatsoever to the others. I suggest the Society withdraws its appeal forthwith, so that saner counsels may prevail in the interest of pharmacy as a whole.

L. S. BELLAMY,  
Chelmsford

### Cut-price Dispensing

SIR,—The advertisement [shown here] was in an advertisement sheet forwarded to me from the United States


## PRESCRIPTIONS

Filled At A Cole  
Drug Store Mean  
Big Savings To You!

### WHY?

YOU SAVE UP  
TO 20%  
on all prescriptions by joining  
Cole Prescription Club Plan.  
Ask our graduate registered  
pharmacist for details.

TENNESSEE'S LEADING  
PRESCRIPTION STORES



of America. Will the day come when we can advertise "Save up to 20 per cent. on all prescriptions"?

B. W. BLOCH,  
Barnet, Herts

### "Gone National"

SIR,—So Optrose has "gone National" and is no longer the chemist's rose-hip syrup. Its makers have followed the now familiar pattern of first offering generous bonus terms to stock up their "friends". I am sure that Messrs. Kel-don have the most valid reasons for the

change in marketing policy and for joining the rat-race with their wealthy competitors. However, if retailers in future promote any rose hip syrup that goes with the heaviest advertising, irrespective of its manufacturer, they can hardly be blamed.

F. CHANNING,  
Hounslow, Middlesex

### Delivered but not Ordered

SIR,—I have received a delivery from Messrs. Coty that included two lines not ordered, namely display outers of Cologne spray and lipsticks. It would be interesting to know if this is an isolated mistake or has anyone else been treated in the same way?

SUSPICIOUS

## MEDICAL MAN-POWER

### Shortage due to public demand

THE number of doctors practising in England and Wales has increased by almost 15 per cent. since 1952, even allowing for the increase in population it is stated in the latest Office of Health Economics report "Medical Manpower" (Office of Health Economics, 62 Brompton Road, London, S.W.3, price 2s. 6d.). Per million population the number rose from 711 in 1952 to 815 in 1963; for 1964 the number had fallen again slightly to 814. The number of hospital doctors rose from under 12,000 in 1949 to over 18,000 in 1965. Even the number of general practitioners "which is creating so much dissatisfaction at present" is reported to be more or less equal to the number the Willink Report of 1957 expected would be satisfactory for the present size of population.

### Doctor Shortage

The present "doctor shortage" has thus arisen mainly because the Willink Report failed to anticipate the way in which "demand for doctors would be affected by changes in the nation's economic prosperity." However, the report points out, that this "was only a reflection of the general failure to realise at that time that a wealthier society would naturally wish to spend more on medical care." In addition, there was a failure at that time to appreciate the extent of medical emigration from Britain. There has also been too little effort to modify the medical career structure to take account of the rapid technological progress and the consequent changing pattern of medical care over the past twenty years. Opportunities for doctors to practise overseas in posts providing regular 'home leave' have diminished, and the present-day migration of British doctors overseas has, therefore, assumed a more permanent character." The report draws attention to the fact that only a small proportion of junior doctors in hospital can expect promotion to consultant posts. Others, who enter general practice after some time in hospital registrar appointments, have often gained specialist experience inappropriate for work outside hospital; also, even if they have a higher qualification, they may be regarded in general practice as

## PRESCRIPTION POSER

THE Lancashire pharmacist who sent in the prescription here shown was completely nonplussed. However, he was told by the patient that "It's those salts for rheumatism." That gave him the clue. Is it clue enough for other C. & D. readers?

- Paul Thompson  
JUL 23 1966

being junior to their contemporaries who entered the practice soon after qualifying. Those factors have contributed to the difficulties of recruiting sufficient British-born junior hospital staff. About 44 per cent. of junior hospital doctors were born abroad; out of the total increase of 1,100 in their numbers between 1961 and 1964, 1,000 came from overseas. The report points to the sharp divergence between specialised hospital medicine and the equally important community care now expected from general practitioners and says that the recent creation of permanent 'medical assistant' appointments in hospital at a level below that of consultant should help to overcome the shortage of doctors to do the routine and emergency work. There are also some encouraging signs of closer liaison between hospitals, general practice and the local health authorities. The elderly chronic sick are still probably receiving medical attention "much inferior" to that provided for the middle classes in the 1930s. If the health services are to seek out cases of need it must affect calculation of how many doctors are needed. The questions of how much of undiagnosed and untreated illness can be tackled, and how many of the latest lifesaving procedures should be made generally available. Until such questions have been answered it is impossible to estimate future needs.

### Urgent Priority

Reorganisation, automation, and even perhaps the elimination of certain medical procedures could make doctors available for more urgent tasks. For the present the most urgent priority is to concentrate on getting the most efficient use of the available manpower. In future, before estimating the number of doctors needed in Britain, their rôle must be redefined and the quality of medical care that can be afforded decided on.

## N.H.S. STATISTICS

IN ENGLAND during April 18,640,676 prescriptions (12,109,060 forms) were dispensed. Total cost was £10,051,523 an average of 129.41d. per prescription.





## CHEMIST AND DRUGGIST

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**"Public Relations" No Panacea**

THE recent appointment by the Pharmaceutical Society of a Press Officer to take over the public-relations activities of Mr. W. K. Fitch when he retires as an assistant secretary of the Society in the near future makes it opportune to consider what "P.R." can and cannot do.

In its external aspects it can see that the organs of the national Press are supplied with full and accurate information about new developments and activities of the Society and its members. Fact is the best safeguard against rumour, as the British nation has good reason to know from the work of its generally admired radio propaganda during the country's years of extreme danger in 1939-45. An alert public-relations officer can act promptly and effectively to draw editors' attention to any inaccuracies in their columns that might adversely affect pharmacy's welfare or reputation. He can try out ways of trying to improve the general image of pharmacists and to remove aspersions unwarrantably cast upon them. In none of those three forms of action can he command newspaper coverage for his efforts, and he must therefore use his best diplomacy, persuasiveness and literary skill to attain his ends. For some of his efforts paragraphs published may bring a feeling of reward — greater or less, perhaps, according to the number of column inches they occupy — but there is no true yardstick of success except a general recognition by pharmacists that they seem to be held in better esteem by the public than at some previous point in history. There are no units for measuring that. And just as it cannot be laid against him if the community continue to hold pharmacists at a low rating, so any improvement in the public's regard for them is much more likely to be due to good service or advice from the individual pharmacists they have dealings with than to any propagandist efforts by a professional spokesman, necessary though he often is in the modern scene.

When it comes to the internal aspect of public relations — the dissemination of information to members of a profession by its governing body — the member himself must actively participate in the exchange of information. Or the whole professional principle breaks down. The problem is shared by all professions and has been most recently the subject of comment within the veterinary profession by the Editor of the *Veterinary Record*, many of whose remarks are as apt to the pharmaceutical scene as to his own. 'Information,' he says, 'is a two-way traffic: it has to be received as well

as dispensed; and if the Council has a duty towards the members, so they in turn have a duty towards the Council. Twice, recently, complaints have been made both by divisions and by individuals that they had not been informed when matters of major importance were under advisement. . . . Yet both these topics were . . . ventilated either in Council or at the Annual General Meeting long before the complainants seem to have become aware of them." The *Record's* Editor quotes the president of the British Veterinary Association as saying: "The membership must make up its mind whether it wishes to lead or be led. All of us in this room are here at the direct request of our fellow members who, presumably carefully, chose us . . . one would hope that confidence exists between (us) — confidence, we venture to suggest, based not only on personalities, but on information made available from the centre and taken note of by the general body of the profession."

That is the crux of the matter. The elected executive body of a society or association should be able to speak and act as the expression of a common will, inspiring confidence in, and reposing in the confidence of, its electorate, who, of course, have always the power to replace it or any elected member of it.

We have never disguised our belief that the reports of activities of the Pharmaceutical Society's Council should be fuller than they are, revealing how decisions were arrived at as well as what they are, and who championed and who impeded particular policies. But there is no excuse for any member's ignorance of what is made known, and every need for him to be fully familiar with it.

**Dearer Money**

OVERSHADOWING all events in the past week has been Britain's looming economic crisis. The first positive measure to counteract the renewed pressure on the £ sterling was taken on July 14, when the Bank Rate was raised from 6 per cent. (at which it had stood for thirteen months) to 7 per cent. The consequences of the higher rate must now be painfully familiar to all. Not only will it be dearer to borrow money from the banks, it will also, on this occasion, be more difficult, owing to the Government's having ordered the clearing banks (in England) to double their special deposits with the Bank of England. Further measures to reduce internal demand — both public and private — were promised and were expected to be announced in Parliament as THE CHEMIST AND DRUGGIST was going to Press.

**Onward from Galen****SIDELINES OF CURRENT COMMENT**

★ "GREATEST CHEMICAL DISCOVERER OF ALL TIME" ★

SIR William Ramsay, who died fifty years ago on July 23, was described by one admirer in the words quoted above. Born and educated in Glasgow, he began his chemistry training in Tatlock's laboratory in that city, going on, in 1871, to Germany to study under von Bunsen and Fittig. Back in Glasgow the following year, he was appointed assistant in the Young laboratory of technical chemistry, and two years later became assistant in the University's chemistry department. In 1880 Ramsay was professor of chemistry at University College, Bristol and, a year later, became principal there. He occupied the chair of general chemistry at University College, London, 1887-1912..

Ramsay's achievements are manifold. In Glasgow he



researched into organic chemistry, concentrating mainly on pyridinic acids. At Bristol he was more closely concerned with physical chemistry, and published several important papers on vapour densities, critical constants, evaporation and dissociation. His London work may be divided into three periods. During the first he undertook researches into the determination of molecular complexity of pure liquids by calculation from variations with temperature of the molecular surface energies. The fruitful second period saw

Ramsay's discovery of five chemically inert elementary gases, which he named respectively argon, helium, neon, krypton, and xenon. In the last, and perhaps greatest, period Ramsay discovered that the emanation of radium produces helium during its atomic disintegration. That discovery opened up immense possibilities of atomic projectiles for bringing about the decomposition of ordinary stable atoms of matter, a discovery that was later to be developed further by Rutherford.



## "OPEN SHOP"

An unscripted commentary on the special problems of the pharmacist in general practice

By E. C. TENNER

**L**AST month I dealt at some length with the question of rural dispensing and the fight that lies before the Pharmaceutical Committees on this matter. Since then I have had the opportunity of reading some extracts from a report of the annual conference of Local Medical Committees, and am glad to note that, if anything, the doctors appear to be even more worried than ourselves regarding the outcome of this fight. I am pleased to say that my own Pharmaceutical Committee has now appointed the members of its Dispensing Committee and is also actively engaged in gathering detailed information regarding the problem throughout our area. When this information has been collated it is hoped to hold a series of meetings between the pharmacist members of the dispensing committee and the rural pharmacists concerned, so that we may be able to present the best possible case at meetings of the full dispensing committee. I note that the most recent suggestion regarding the constitution of Dispensing Committees is the addition of an extra two lay members, making it three pharmacists, three doctors, two lay members and a lay chairman. From what I can ascertain this suggestion is meeting with a mixed reception, but my personal feeling is that it has considerable merit. Reason suggests that in many cases the pharmacists and doctors will be diametrically opposed, so that the ultimate decision would rest with the casting vote of the lay chairman and, good as he may be, it would surely place him in a most difficult position. Thus it would appear that the presence of the two extra lay members would at least permit a reasonable and intelligent discussion of each case, and the chairman would only be called upon to intervene if the lay members had opposing opinions after hearing the arguments put forward. Once again I would express the hope that all Pharmaceutical Committees concerned are actively pursuing this most important matter.

### *Pharmacists as Representatives*

The recent article dealing with a report of the Consumer Council on the safety of drugs had several interesting passages. On the subject of representatives, I am quite sure that the vast majority of pharmaceutical specialities manufacturers would prefer to employ pharmacists to detail their products to doctors, the main problem being that in this field, as in practically every other field of pharmaceutical activity, there are just not enough pharmacists available. Perhaps the Consumer Council is unaware of this rather important fact. One thing I personally notice in this matter is that the pharmacist representatives appear to stay much longer with their companies than the unqualified ones. Perhaps one may reasonably assume that they prove to be much more efficient. One of the many problems which we all face is surely that so few representatives seem now to stay long enough with one company to

enable us really to get to know them. After all, many of our dealings with them are a matter of mutual trust, which can only be built up over a period of years, and it is really rather a shocking state of affairs when one finds a representative actually boasting that he has called upon one three times. No doubt this constant change is one of the many results that arise from the present state of full employment, but of two things I am rather wary — first, of a representative who changes his firm too often, and secondly, of a firm that changes its representatives too often. With the Consumer Council's remarks on the subject of advertising of medicines to the public one can hardly quarrel, and can only hope that the promised legislation on medicines will deal with this matter thoroughly.

### *Inquiries in Progress*

This is certainly the season of inquiries, possibly some of my colleagues will be participating in both the current ones; the latest joint inquiry into dispensing costs, and the Board of Trade census of distribution. Regarding the dispensing inquiry I was glad to find that a near neighbour of mine, who had been selected to take part, expressed himself as very pleased with the way in which the two observers conducted their part of the work. It will, of course, be quite some time before the results of this are available, so we shall just have to be patient. Some years ago I did myself have to complete the Board of Trade return, and my sympathy goes out to those who will have to struggle with the present one.

### *Coupons Unannounced*

The district covered by our branch shop has recently been saturated with coupons for a new tooth-paste. In some ways this is all very well, for it certainly stimulates sales. The amazing part of the matter is that the first we knew of the existence of the product was from one of the same coupons. It is incredible that the manufacturers of this product should be so badly organised that they distributed the coupons without even letting dealers know and ensuring that stocks would be available. The position was further aggravated by the fact that — from the same cause presumably — the stocks of all our local wholesalers were rapidly exhausted. The reception I gave to the maker's representative when he called can be imagined.

To conclude on a happier note, a few days ago I received an envelope from Mallinson House, and was delighted to find that it contained a letter from Chemists Mutual Insurance Co., and even more delighted to find that a cheque was enclosed representing a bonus refund of a percentage of my insurance premiums. Insurance is now such an important matter, and even with Chemists Mutual so expensive an item that a bonus of this nature is most welcome.



# QUALITY CONTROL IN A SMALL HOSPITAL GROUP

J. D. APPLETON and B. MOTTERSHEAD

(Pharmaceutical department, Friarage Hospital Northallerton, Yorks)

**M**ANY hospital pharmacists are doubtful whether they should undertake quality control and are of the opinion that it is only possible with a vast array of equipment and large amounts of bench space as well as staff. We here relate our experience of the introduction of quality control of our own products.

We endeavoured to investigate in our own small hospital group the degree of control of hospital-manufactured items that could be achieved with minimum apparatus and carried out reasonably quickly and easily by our existing staff. Finally — since space in most departments is at a premium — we sought an answer to the question whether such a section could be included in the existing department without taking up too much bench and cupboard space.

## Feasible

An examination of the problem quickly revealed that the answer to most of the questions of the feasibility of such a scheme was "Yes." At an expenditure of little over £5 it was possible to purchase a selection of pipettes, burettes, filtration and volumetric flasks and separating funnels sufficient to form the nucleus of such a section. Together with items already in general use in the pharmacy, such as bunsen burners, tripods, stands, etc., our initial equipment problem was solved.

Although we were fortunate enough to possess an analytical balance we do not feel that it is an absolute essential in the early stages of such a scheme, since all common volumetric solutions can be purchased standardised in a concentrated form and need dilution only, and so exclude the need of accurate weighings. Items to be tested were, in the early stages of our scheme, also, for the most part, already in liquid form. We eventually extended our range of chemicals to include those required for non-aqueous titration, and so additional methods became available that either replaced or modified what would otherwise have been time-consuming procedures.

A small section of bench (length 5 ft.) was ear-marked for the purpose, and a few additional shelves were fixed

around it to hold small bottles of reagents and test solutions, etc. The solutions were prepared according to the Appendix to the B.P. as and when required, so we have gradually amassed a range of suitable standard and test solutions, indicators, etc. The problem of storage of equipment was solved by the use of a single cupboard.

The first item routinely assayed was normal saline. From that original item we attempted to test the quality of each of our manufactured products. Where that was not possible owing to lack of equipment, etc., a sample was set on one side pending our search for a suitable method that we could use, either as it stood or modified. (Volume 2 of Martindale has proved a tremendous source of information.) In this way we have gradually built up methods of control to cover an increasing range of our manufactured products, including all injections, which we considered to be our first priority.

The following is a list of the types of items over which some quality control can be exercised using nothing but simple equipment.

- Sodium chloride solutions—all strengths.
- Sodium citrate irrigation solution.
- Solutions containing sodium lactate.
- Sodium bicarbonate solutions.
- Injections of potassium chloride.
- Injections of pethidine hydrochloride.
- Injections of procaine hydrochloride.
- Solutions for peritoneal dialysis of lactates and total chlorides.
- Injection of lignocaine hydrochloride (all strengths).
- Eusol and other chlorinated lime solutions.
- Mercury oxycyanide solutions.
- Hydrogen peroxide solutions.
- Tests for oxidisable matter in water for injection.
- Injections of morphine.
- Injections of atropine sulphate.

The possession of a balance immensely increases the above range. In some instances simple colorimetric estimations can be carried out, using Nessler tubes (e.g., Hibitane,

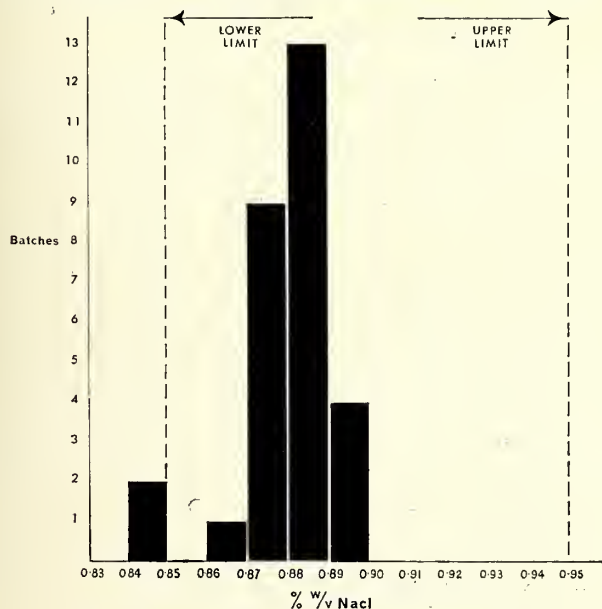


Fig. 1. Results of assay during first three months.

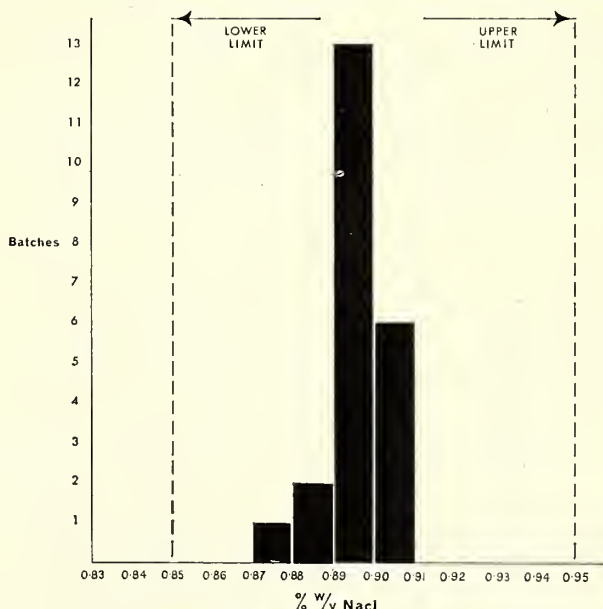


Fig. 2. Results of assay during last three months.



1—5000 solution). Confirmatory tests are also carried out in some instances (e.g. tests for bactericides where these are an essential part of the formulation, as in eye drops and injections). Where an assay is not specific a qualitative test is carried out to prove that it is in fact the active ingredient that is being assayed.

To extend the effective control still further we felt that certain pieces of equipment were necessary. Through the sympathetic understanding of our Hospital Management Committee we were permitted to purchase a pH meter, while an old colorimeter was reconditioned for a few pounds. As a result of these additional pieces of equipment we are now able to monitor pH on all intravenous fluids, both hospital-manufactured and commercial. We are now investigating the possibility of using the pH meter for determining dead-stop end points and potentiometric titrations in non-aqueous media. The colorimeter has increased both the range and accuracy of our colorimetric determinations.

### Benefits of control

The necessity of quality control in hospital pharmacy is best shown by taking a simple example such as sodium chloride solution, 0.9 per cent, a sterile solution used mainly for bladder irrigation. It is prepared in batches of 40-70 litres by dispensing assistants. The sodium chloride is checked for quantity by a pharmacist, who signs a register. Apart from checking the sterilising cycle from the thermographs, no other supervision is felt to be necessary. Fig. 1 shows the distribution of the results from assays of all batches made during the first three months, after the introduction of quality control, and Fig. 2 shows comparable results in a subsequent three months. The improvement in quality can be clearly seen, most solutions in the former list being 0.87—0.89 per cent, in the latter the norm being 0.89—0.91 per cent. Out of 110 batches five have, since quality control was started, been rejected as being outside the limits. Chief reason for the errors has been careless making up to volume. One batch was not homogeneous, and inquiry showed that the sodium chloride may not have been completely dissolved before the solution was packed. The reason for another batch not being homogeneous was considered to be that the tops had not been tightened down before autoclaving. Without quality control those errors would not have been detected, and the proportion of batches below standard was probably higher in the period before quality control was applied.

So much for our progress to date. In the near future, apart from consolidating our previous work, we hope to look into the possibility of bacteriological control. Cross infection in hospitals due to pharmaceuticals is gaining more prominence, and pharmacists should make a reappraisal of all their products in the light of it.

The growth of *Pseudomonas aeruginosa* in oil-in-water creams preserved with chlorocresol has been reported<sup>1</sup> and the contamination of 1—5000 chlorhexidine solutions with *pseudomonas* spp.<sup>2</sup> (We believe all solutions for bladder irrigation should be sterilised.) We hope to investigate many of our products from that aspect and to monitor the distilled-water storage tanks, even though they are frequently emptied and cleaned. We also propose to monitor the areas in which aseptic technique and sterilisation by filtration is carried out because, though those products are tested for sterility, such tests are statistically not entirely satisfactory, and a check on the working conditions would seem an additional safeguard.

Many official preparations should be recently prepared, and many hospital formulations have equally vague shelf lives. We hope to look into particular preparations that concern us and to apply quality control as an aid in assessing a definite shelf life under actual working conditions.

We have attempted to relate our own experience in the introduction of quality control in a small hospital and to show that we can no longer afford to take it for granted

that our products are up to standard, and further that comprehensive tests can be done with little equipment, space and time.

### REFERENCES

1. Noble and Savin, *Lancet*, 1966. 1.347.
2. Mitchell and others, *Lancet*, 1966. 1.793.

## Any Business Questions?

*I own a company carrying on a pharmaceutical business and I also own the business premises. I had thought of passing the property over to the company for shares, but I am told that to do so may involve capital gains tax. Is this correct?*

Yes, this would constitute a disposal and would require the asset to be treated as sold at its market value. A capital gain could arise as a result, and you be liable to tax at 30 per cent thereon.

*My bank is now issuing cheques with an account number printed on them in some sort of magnetic ink in order to permit the sorting of cheques for processing in a computer. Does that mean that I cannot now borrow a cheque or write one on a piece of plain paper, as used to be the case?*

The situation is that you can cross out the account number but the machine will still read the magnetic characters. The bank's responsibility for allocating cheques to the correct account is in no way reduced. Your right to make out a cheque on any suitable piece of paper is unaffected.

*I own a small property company which owns the property occupied by my pharmacy. I rather gather that the company may now be unnecessary or even actually disadvantageous as a result of the new tax legislation. Can you advise me about this, please?*

It is certainly true that many small property companies are now actually disadvantageous. They do not enjoy the £1,500 minimum limit in relation to distributions for income tax under Schedule F, as applied by the corporation-tax legislation, and in addition they are liable for tax at the full corporation tax rate of 40 per cent. on their capital gains, whereas the individual would be liable at only 30 per cent. In those circumstances your company, if it were to sell the property and realise a capital gain, would be liable for corporation tax at the full amount of the capital gain. If, in addition, you were then able profitably to dispose of your shares in the company, you might be liable to further capital gains tax on any gain in the value of your shares. Since any increase in the value of your shares would be a partial reflection of the sale of the property at a higher value, the effect would be to charge capital gains tax twice on the same capital profit. In those circumstances many small property companies of this nature are better wound up.

*Please advise me, as a surtax payer, the amount of salary it would be advantageous, from the tax angle, to pay my wife. She has been employed by me for a number of years and I have been paying her £8 per week under P.A.Y.E. Apart from that salary appearing somewhat inadequate in present conditions, I am of the opinion that I should save tax if her salary were increased.*

ASSUMING that you enjoy, as your earnings, the whole of your business profits, and are not paid a salary by a company as a director, the payment of an increased amount of remuneration to your wife would simply reduce your own earnings by a similar amount. For surtax purposes that would make no difference whatever, but it would appear that the salary of £8 per week would be insufficient to exhaust both the additional personal allowance and reduced rate relief together with earned income relief which your wife would be entitled to enjoy. You do not give sufficient particulars to permit a fully accurate reply in this matter but, assuming that your total earned income, as opposed to unearned income, does not exceed £4,005 per annum, including the earned income attributable to your wife, you could pay her a salary of about £650 per annum before she would be liable for tax at the standard rate of income tax. Thus you would benefit by taking advantage of additional reduced rate reliefs by increasing her salary to about that extent.



# Pharmaceutical Society of Ireland

## MONTHLY MEETING OF COUNCIL

THE Council of the Pharmaceutical Society of Ireland has been assured by the outgoing Minister for Health (Mr. O'Malley) that, to expedite implementation of the recommendations of *Comhairle na Nimheanna* (the Poisons Council), he had arranged for consultations to clarify technical matters to take place as quickly as possible. A letter from the Minister, read at the meeting of the Council on July 12, also pointed out that every effort would be made to expedite the drafting of the necessary regulations under section 14 of the Poisons Act, 1961, when examination of the recommendations had been completed. It was unanimously agreed to write to Mr. O'Malley thanking him for his undertakings to the Council and wishing him success as Minister for Education.

### Government Proposals

The Minister's letter included the following note in reply to points made by the Council: "I also wish to confirm (a) that steps are being taken to extend by Government Order the list of substances controlled by the Dangerous Drugs Act; and (b) that, as regards the reference in the White Paper on the Health Services to the making of statutory provisions governing the possession of "pep" pills, the point made by the deputation in regard to substances such as lysergic acid diethylamide will be taken into account in the drafting of these provisions. In connection with the Society's letter of March 26 in regard to difficulties which arise in the day-to-day administration of regulations governing poisons and controlled preparations, and the Society's letter of May 31 concerning breaches of the Medical Preparations (Barbiturate) Regulations, 1954, by a particular pharmacist, I am arranging, on the assumption that the Society has no objection, that these matters will be discussed by officers of my Department and the Society's registrar at an early date."

MR. D. J. KENNELLY thought that the main difficulty in finalising the recommendation of *Comhairle na Nimheanna* would hinge around the legal drafting. He had no doubt the Minister was keenly aware of the urgent need to introduce the regulations with the minimum of delay. Messrs. F. Loughman and M. J. Mulreany thought that everything the deputation had set out to accomplish had been achieved.

MR. T. R. MILLER complimented the deputation on the able manner in which they had put the case to the Minister, who could not have failed to be impressed by their honesty and integrity. The Society was under a debt of gratitude to Mr. O'Malley, who had not only spelled out what he wanted done in regard to the recommendation, but had gone to the trouble of confirming it in writing to the Council on the eve of his departure from office.

### Register for Representatives

Professor Paul J. Cannon had written to say that, from an article (by Wilson and Banks) in the *Pharmaceutical Journal*, dealing with the status of pharmaceutical representatives, there appeared to be a likelihood of continued room for non-graduates as representatives. It seemed clear the main consideration in the training of such representatives was pharmacological. Quoting a comment by Sir Hugh Linstead that "firms deserve the personnel they select" Professor Cannon said that to some extent a diploma in pharmacology could be regarded as a possible solution. He did not doubt that doctors preferred to be visited by qualified personnel. He also referred to the desirability of setting up a register for such representatives.

The president (MR. J. P. O'DONNELL) thought that the introduction of the suggested diploma would be a retrograde step. The ideal representative was a pharmaceutical

chemist who had a thorough knowledge of drugs and their chemical structures. To have any less-qualified personnel would damage the medical and pharmaceutical professions and the pharmaceutical industry. He pointed out that the medical profession had already indicated that they preferred the pharmaceutical chemist to call on them. He would like the pharmaceutical industry to make its views known on the matter. He added that the Council intended bringing out a brochure dealing with pharmacy as a career and said it was hoped to stress the great future awaiting fully qualified pharmaceutical representatives.

The registrar (MR. J. G. COLEMAN) stated that, at a Committee meeting the previous night, the vice-president (MR. M. C. CASHMAN) (who, with Mr. M. Power, Dr. W. E. Boles and Mr. T. J. Harty had submitted apologies for being unable to attend the Council meeting) had been opposed to the introduction of a diploma. MR. M. J. MULREANY stressed that the Society had no statutory function to award a diploma.

### A Serious Responsibility

MR. D. J. KENNELLY said that at present the primary function of the pharmaceutical representative appeared to be to promote his firm's commodities to the medical profession—and occasionally to the pharmaceutical profession. Such an occupation carried with it a serious responsibility. The medical and pharmaceutical professions had grave moral and professional responsibilities in prescribing and compounding, and it was necessary that the representative should be technically and professionally qualified. The only person suitably qualified for that work was the pharmaceutical chemist, who was fully trained in pharmacology.

MR. Kennelly added that for almost a century the Society had consistently endeavoured to safeguard the public health in the matter of drugs. That was even more necessary today, when large commercial companies were engaged in the production of medicaments and the Society, a statutory body, could not compromise on so serious a matter.

### Outside Scope

MR. T. R. MILLER agreed that it would be outside the Society's scope to contemplate anything in the nature of a diploma.

MR. M. F. WALSH was pleased to hear members' views being expounded so positively. They could expect that, in the years ahead, more and more potentially dangerous products would come on the market, and the representative should be able to discuss their toxicity and dangers. The Society was to be congratulated on being the first pharmaceutical educational body to give such a positive lead in making known its views, and he hoped other societies would follow suit, so that educational programmes could be aligned.

MR. MULREANY said that, if the Council agreed to establish a register—particularly of people who never spent a day in a pharmacy—it would lead to a serious and unsatisfactory position. Such people might claim absolute qualification in the end. Mr. Walsh pointed out that it was the Council's duty to ensure that enough pharmacists would be available. MR. R. J. POWER added his support to the view that representatives should be pharmacists.

MR. R. J. SEMPLE mentioned that the most successful pharmaceutical manufacturers had always employed pharmaceutical chemists as representatives. Only in recent years when commercial enterprises took on drugs as side lines, had unqualified representatives been appointed. He suggested that the Society should recommend to industry that only pharmaceutical chemists should be appointed. MR. MILLER replied that it would be outside the functions of the Council to make such a recommendation.



It was agreed to write to Professor Cannon explaining the Society's difficulties in the matter and pointing out that they could sponsor the introduction of the proposed diploma.

### *Appeal for Prescription Details*

On behalf of the Practice of Pharmacy Committee, MR. WALSH expressed thanks to the pharmacists who had responded to the appeal made at the previous Council meeting to forward details of the number of prescriptions they compounded. To date, said MR. MILLER, upwards of 400 pharmacists had completed and returned the questionnaire. He appealed to those who had not responded to do so immediately, pointing out that the purpose was to get a good cross-section opinion of prevailing conditions in pharmacy. The Committee was not probing into the affairs of individual pharmacists, but merely trying to get an overall picture in relation to the proposed new Health Bill.

MR. WALSH added that the Committee had prepared drawings that would be made available to pharmacists intending to fit a separate drug section to their premises in the event of their participating in the new Health scheme. The idea was to make maximum use of available space. A final decision on the type of emblem it was proposed pharmacists and assistants should wear as a mark of distinction had not yet been decided on. Drawings of three proposed emblems were under consideration. MR. MILLER paid tribute to the sister in charge of art at Sion Hill convent, who had, he said, produced three very acceptable drawings.

MR. WALSH also announced that work was proceeding on the preparation of a brochure aimed at attracting more recruits to pharmacy. It would be available for distribution at the science exhibition at the Royal Dublin Society grounds, Ballsbridge, in October, at which the Society would be officially represented.

Professor R. F. Timoney (dean of the College of Pharmacy) was congratulated on having been invited by the Minister for Health to act on a Committee set up to examine ways of ensuring drug safety and to establish communication with existing bodies in other countries. A letter was received from the Department of Health acknowledging the appointment of Professor Timoney to the Committee on Therapeutic Substances.

The Council voted warmest congratulations to Mr. O. Waller (Editor of *THE CHEMIST AND DRUGGIST*) on his being designated a Fellow of the Pharmaceutical Society of Great Britain in recognition of his services to pharmacy as a journalist.

Arising out of the Law Committee's Report, the Society's Inspector (MR. P. CUMMINS) reported that, in general, the recording of Part I poisons had not been too good, but there had been a big improvement in the recording and filing of prescriptions for controlled preparations.

THE REGISTRAR reported that, by arrangement, the meeting between representatives of the Council and the Irish Drug Association to discuss matters of mutual interest, had been deferred until after the summer holidays. He expected in a week's time to have a report of the recent visit of Dr. Hartley and Professor Beckett to the college. He would then circulate it to members and a special meeting would be held on July 29 to consider it.

The Registrar reported the death of John J. Walsh, M.P.S.I. Marriage certificates having been submitted, Eileen Frances O'Callaghan (née Killian), L.P.S.I., and Catherine Clare Cuddigan (née Dunne), Pharmaceutical Assistant, were granted change of name in the Registers. Dr. Matthew J. P. Smith, who submitted an L.A.H. certificate, was registered as a Pharmaceutical Chemist.

The Licence certificate of Chandrakant K. Shah, Nairobi, Kenya, was signed and sealed.

The following were elected to membership: - Eamon J. Hayes, L.P.S.I., 56 Tritonville Road, Sandymount, Dublin 4; Michael Mockler, L.P.S.I., Ardower, Upper Taylor's Hill, Galway; James McCormick, L.P.S.I., Ardcolm, Milford, Letterkenny, co. Donegal; Donal McGoe, L.P.S.I., 63 New Street, Ballinrobe, co. Mayo.

Jeremiah Walsh, Carrigaline, co. Cork, was elected to Associate Membership.

The following were restored to the Register of Pharmaceutical Chemists: - Brigid P. Hall (née O'Sullivan); Mary P. Dillon; Josephine B. C. Feehan (née Jones); Sarah M. J. Madden; P. Power; J. J. McHenry; Mary E. D'Arcy.

The following were restored to the Register of Assistants to Pharmaceutical Chemists: - Clare L. Carty (née Tuite); Margaret C. Brady (née Daly); Julia B. O'Connor (née O'Sullivan).

The following changes of address were noted: - H. G. Egan, M.P.S.I., to 1 West Street, Drogheda, co. Louth; P. P. A. Smith, M.P.S.I., to 78 Taney Crescent, Dundrum, Dublin, 14; P. C. Singleton, M.P.S.I., to 39 Maywood Park, Raheny, Dublin, 5; J. J. Keogh, L.P.S.I., to 40 Terenure Road East, Rathgar, Dublin, 6; Mrs. Esther O'Connor, L.P.S.I., to Canal Street, Tirkeenan, Monaghan; Mrs. Philomena F. Gannon, M.P.S.I., to Bridge Street, Ballinrobe, co. Mayo; J. Dillon, M.P.S.I., to Percival Street, Kanturk, co. Cork; Mrs. Mary P. Dillon, L.P.S.I., to Percival Street, Kanturk, co. Cork; Mrs. Patricia M. O'Sullivan, L.P.S.I., to 39 St. Brendan's Drive, Coolock, Dublin, 5.

The following were nominated for membership: - Therese M. Sheehan, L.P.S.I., 33 Braemor Park, Rathgar, Dublin, 14; Kathleen Lyster, L.P.S.I., Lugboy, Elphin, co. Roscommon; J. J. McHenry, L.P.S.I., 68 Clontarf Road, Clontarf, Dublin, 3; T. Feerick, L.P.S.I., Main Street, Cappoquin, co. Waterford; P. Power, L.P.S.I., 33 Ballybricken, co. Waterford; Mary P. Dillon, L.P.S.I., Percival Street, Kanturk, co. Cork.

Members present were: Messrs. T. R. Miller; H. P. Corrigan; C. J. Cremen; D. J. Kennelly; F. Loughman; M. J. Mulreany; G. C. O'Neill; T. B. O'Sullivan; R. J. Power; R. J. Semple; and M. F. Walsh.

A number of grants to cover July and August, were passed for payment at a meeting of the Benevolent Fund, which followed.

## **A PHARMACIST'S ANTHOLOGY CURES FOR IDLENESS**

From "My Moorland Patients," by R. W. S. Bishop

"SOMETIMES this bone-laziness was looked upon as an infirmity but, like cancer, was considered to be quite beyond medical cure. It was then called 'Laakin fever' (with derivation from the Danish *at lege* to play). Anxious relatives with the appeal of despair would ask me if nothing could be done for the unfortunate sufferers. One hard-working farmer had a son who was a thoroughly bad lot, a typical 'bowdykite' who fair trembled agean at the mention of the word work. One day he remarked that though he believed I was a 'varra clever feller' yet he was ready to bet me a sovereign that I could not cure his son of his disorder. To his surprise I struck the bet with a forcible smack of the hand and the unsatisfactory son was sent for. He happened to be in a very good humour at the time, seemed much amused when he heard the nature of the bet, and at once offered to undergo any treatment ordered. I explained the *modus operandi*—that two blisters would be applied to that part of his anatomy provided for sitting down, and that at night he must take one of my celebrated 'early risers,' a pill which would call him out of bed at 5 o'clock in the morning. I also told him he would be required to come down to my surgery for a course of faradic stimulation. He took exception to the blisters but came down for the electric treatment. I placed the two rheophores under his oxters (armpits) and gave him a good ten minutes at high pressure, during which he 'flackered, dithered, dothered and shook awl over.' This very drastic treatment he stood like a man though 'sweat' rolled down his face. He took also in my presence one of my pills. It was a lightning cure. He sent a message next day to say that he had had more than 'eneagh' of that 'rivin devilment' and was going to work that same afternoon. Whether it was a case of sudden repentance or the suggestion that cure was possible, or a sympathetic wish that I should win the debt I know not, but the miracle had been worked. From that day he turned over a new leaf. He became very industrious and all his 'black fat'—the native expression for superfluous blubber—disappeared. The farmer, who was so overjoyed at his son's reformation, sent me a fine Yorkshire ham instead of the sovereign and my wonderful cure was much 'cracked' and discussed."



# Three Million Hard Capsules a Day

## PRODUCTION STEPPED UP AT HOUNSLOW

A NEW capsule manufacturing machine going into operation this month at the Hounslow factory of Parke-Davis & Co. will raise the company's output of hard-gelatin capsules to more than three million capsules a day.

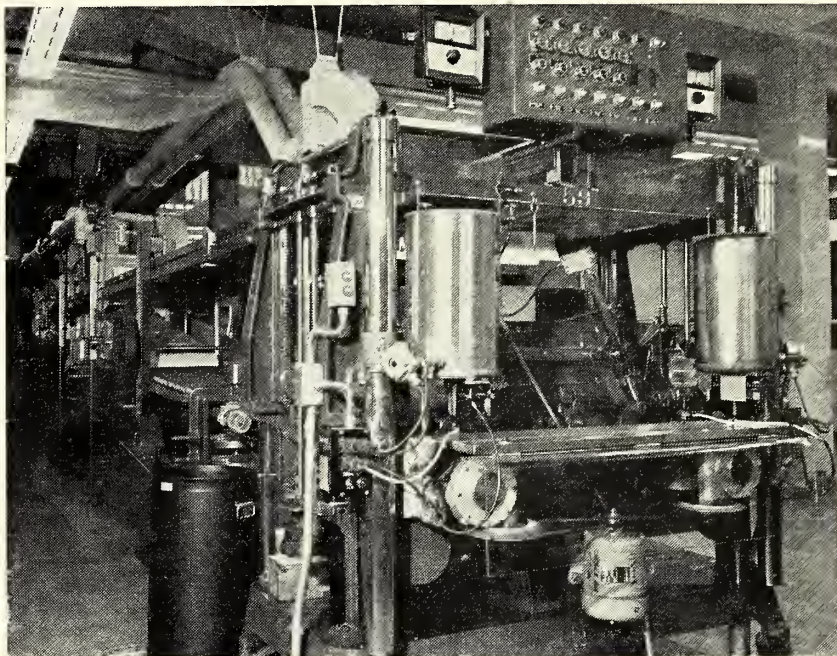
### Two Halves Simultaneously

The new 40-ft.-long machine, like the others in operation at the works, was developed and manufactured by the company's own capsule engineering division, and is thought to be the most advanced type available for hard-gelatin capsule manufacture, being designed to allow a maximum tolerance of one halfthousandth of an inch in wall thickness of the capsule. The result is a low failure rate on subsequent assembly of the capsule halves.

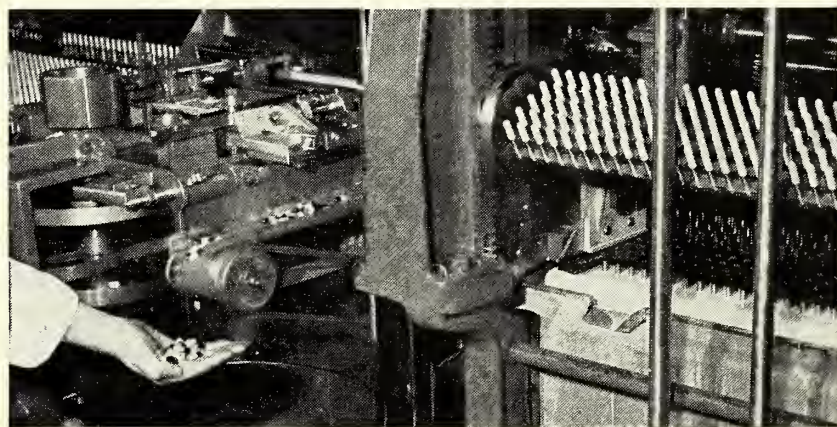
The new machine is designed to produce the two capsule halves simultaneously and to bring them together at the end of the production process. At a later stage the halves are separated for filling. The caps are cast, dried and finished on one side of the machine and the capsule bodies prepared on the other. Mould bars, each bearing thirty stainless-steel casting pins, are assembled in groups of five on each side of the machine, and the casting pins are adjusted so that they dip only to a required depth into the previously prepared, molten gelatin. To enable that to be done the level of the gelatin in the dip dishes is accurately and automatically maintained. Timing of the dip and correct distribution of the gelatin are critical.

After dipping, the casting pins are rotated upwards to the top deck of the machine, slowly progressing along its length and through drying kilns in which air at 72-82 deg. F. is blown through a screen, so positioned that each capsule receives an individual blast of air. After about 40 minutes the capsules are hard and ready for stripping, but they are first passed through a cooling kiln in order to ensure that the pins are at the optimum temperature for the next cycle. The stripping device consists of 30 tiny claws to which the casting pins are presented. The claws grip the pins behind the capsules and pull them into a row of collets, on which they are trimmed by rotation against a tungsten-alloy blade and ejected into a joiner block, where cap and body of the capsule are mated and thrust from the machine thirty at a time. The stripped pins are then lubricated and polished in felt-lined sockets and passed on for the next cycle.

Messrs. Parke-Davis's proud claim is to have pioneered the mass production of hard-gelatin capsules in 1875. Today they produce a high proportion of all capsules of the type used in the United Kingdom for meeting both the company's own needs and those of other pharmaceutical manufacturers. The current range provides eight sizes of capsule and about 1,800 colour com-



The new 40-ft.-long capsule-manufacturing machine. The machine was developed and manufactured by the capsule engineering division.



Catching some of the capsules produced by the machine.

binations for identification purposes. The capsules can, if required, be printed individually with a company name or that of the drug they will contain.

### Increasing Demand

Although hard-gelatin capsules have been used for the dispensing of drugs for nearly a century, the demand for encapsulated products has undergone a dramatic increase only within the past twenty years. Their attraction to the pharmaceutical manufacturer is that they offer an elegant, attractive and accurate method of dispensing medicines. They enable manufacturing costs to be reduced whilst giving greater protection for active ingredients against the effects of light, air, humidity and

mechanical stress. The advantage to the patient is a complete absence of taste or odour whilst the drug is taken and a product usually easier to swallow and more pleasant to handle than a pill. Most important feature of capsule, the makers stress, is that the medicine is quickly released, usually in as a free-flowing powder, for rapid absorption from the gut into the general circulation of the body.

### OVERSEAS VISITS

MR. R. LEVIN (marketing director, Syntex Pharmaceuticals, Ltd.), has left London on a two-week visit to East and South Africa to complete distribution arrangements for the company's products with local agents.



## N.P.U. EXECUTIVE COMMITTEE

### A new "action group" on Dickson case

THE "Dickson" judgment was discussed by the N.P.U. Executive Committee when it met in London on June 29. Mr. E. A. Brocklehurst in the chair. MR. ALLEN ALDINGTON read out an abbreviated version of the judgment. MR. J. WRIGHT (secretary) presented a memorandum setting out his views upon it, on the possibility of appeal, and on the probable effects, both immediate and long-term, upon the Union and its members. The Committee agreed to appoint an "action group" of five senior members of Executive (Messrs. Brocklehurst, Moss, Coulson, David and Rees) to advise on policy and future action. The Committee is to work closely with the Society's Council on the matter, making freely available the advice of the Executive on matters affecting private pharmacy.

#### Payroll Tax

There was general satisfaction at the large numbers of members who had responded to the recommendation to write individually to the Chancellor of the Exchequer, the Minister of Health and local Members of Parliament about the adverse effects of the "payroll" tax, with particular reference to part-time employees. Many helpful replies had been received, but one Member of Parliament in the Midlands had made adverse comments, holding that pharmacy could better stand the new tax than any other section of distribution (reasons: more self-employed staff; more commodities were "protected to pharmacy as a sales agency.") Members were told that the secretary had arranged an interview with the Member of Parliament concerned.

#### Burdens on Retail Distribution

The National Chamber of Trade is being asked to make representations to the Government about the increasing burden on retail distribution resulting from such measures as the investment allowance withdrawal, increased National Insurance contributions, the redundancy payment scheme and the new "payroll" tax. The secretary announced his appointment to the law and parliamentary committee of the Chamber; it would provide valuable opportunities, he said, for examining all new Parliamentary Bills at the earliest possible stage.

#### Policy on Pay

A verbal report was presented of a meeting of the *ad hoc* subcommittee of the National Joint Industrial Council for Retail Pharmacy held on June 14, the Executive reaffirmed its long-standing policy decision that there should be no differential between the salaries for male and female pharmacists in the J.I.C. agreement for pharmacists.

The chairman of the Marketing Policy Committee (MR. W. TALVAN REES) reported the orders for the liquid antiseptic had put a severe strain on manufacturing capacity, but everything possible was being done to improve the supply situation.

To meet delays caused by recent increases in the number of members using the clearing house, the transfer to the new offices and the increased load on the local postal authority, additional staff was being recruited and trained. In the meantime firms listed in the Schedule would be advised that everything possible would be done to arrange for payments to be made on the 21st day of each month.

The Association of British Pharmaceutical Industry and Proprietary Association of Great Britain are being pressed to reduce variations in the sizes of invoices.

The existing initial charge of 1s. 6d. for the use of the debt-collection service was considered out of line with

present-day economics, and it was agreed to make an initial charge of 7s. 6d., plus 5 per cent. on all sums collected.

#### Postages

The range of publications sent out to members each month having greatly increased, ways of permitting greater flexibility in posting whilst keeping quantities to reasonable proportions were given consideration.

Letters of appreciation were being sent to Mr. J. F. Jack, who was giving up as secretary of North Metropolitan branch to become chairman and to Mr. Leaversuch (past chairman of the Branch) for their service over sixteen years. Amalgamations between the following branches were approved: Norwich and King's Lynn; Great Yarmouth and Lowestoft; Bath and Trowbridge and West Wilts.

## CENTRAL N.H.S. COMMITTEE

### Decisions on rural-area dispensing and eye drops

AT the monthly meeting of the Central N.H.S. (Chemist Contractors) Committee held in London on June 28, Mr. G. T. M. David in the chair, Mr. H. Steinman (a past chairman) was congratulated on his appointment as an officer of the British Empire, and Messrs. Brocklehurst, Coulson, David, Moss and Steinman on being made Fellows of the Pharmaceutical Society.

It was announced that the activity sampling of pharmacies taking part in the N.H.S. remuneration inquiry had been completed by June 8, and that the results were being processed. A reply from the Minister of Health to representations made to the Chancellor of the Exchequer on the subject of the Selective Employment Tax stated that, when the results of the current inquiry into the cost of providing the pharmaceutical services became available, the effects of the new tax could be reviewed and any necessary adjustment made.

ment made.

All applications received for a rural-area subsidy payment in respect of the year ended December 31, 1965, had been considered jointly by the Ministry of Health and the Central N.H.S. Committee, and Executive Councils were being asked to make the appropriate payments. To consider any application in respect of 1965 after July 31, 1966, would not be possible.

It was decided to request the Ministry of Health to authorise pricing bureaux to accept endorsements indicating that eye drops to be prepared by B.P.C. method B had been obtained ready prepared from a wholesaler or manufacturer and to certify payment at the "bought in" price charged by them. The Ministry was also being asked to authorise the pharmacist to supply the nearest original pack or packs available.

## HEALTH SERVICE DRUG COSTS

### Survey shows public still ignorant of facts

ABOUT one-fifth of doctors in general practice believe that the level of profits of the pharmaceutical industry are 'very high' and over one-third that they are 'fairly high', whereas about half of the general public believe the profits to be 'too high' and one-third as 'reasonable.' These facts are given in a report published by the Association of the British Pharmaceutical Industry on July 11. It is based on surveys carried out by Research Services, Ltd., in 1965 along the lines of previous ones in 1962 and 1964 when about 500 of the general public and 250 general practitioners were interviewed in each survey. Among other facts gleaned from the survey are that less than one member of the general public in five knows that pharmaceutical supplies account for only about a tenth of the total National Health Service cost. Seven out of ten substantially overestimate this proportion, and four out of ten think it is at least three times as high as in fact it is. If anything,

this misapprehension about the cost of the pharmaceutical services has tended to become worse over the past three years.

Amongst younger medical practitioners, also, the tendency to overestimate the expenditure on pharmaceuticals has been growing. Thirty-one per cent. of those below the age of forty-five substantially overestimated the proportion of the N.H.S. expenditure devoted to pharmaceuticals in 1965, against 20 per cent. in 1962. Amongst both public and general practitioners about four out of five consider that the proportion of the total N.H.S. cost devoted to pharmaceuticals is increasing. In reality the pharmaceutical services have accounted steadily for 10-11 per cent. of the total N.H.S. bill between 1951 and 1964, increasing to between 11-12 per cent. only in 1965.

The report points out that 'the industry has so far suffered from the lack of any comprehensive and informed appraisal' of their level of



profits. Thus public attitudes do no more than reflect 'wild allegations about the industry's excessive profits,' which have been made despite the fact that for British-owned pharmaceutical companies, at least, the rate of return on capital is 15 per cent. against 14 per cent. for British industry as a whole.

About half the doctors interviewed were aware that medicines were not fully protected under the present Patents Act, while almost two-thirds felt that pharmaceutical manufacturers should be afforded the same degree of protection as other manufacturers. Nine out of ten general practitioners considered that there was a case for prescribing medicines by their brand names either sometimes or always.

Among sources named by general practitioners for keeping up to

date with new medicines, journal articles were mentioned by 67 per cent. in 1965; representatives were mentioned by 49 per cent. Discussions with colleagues, the medical indexes, manufacturers' literature, refresher courses, *Prescribers' Journal*, journal advertisements and medical meetings were the other main sources mentioned. Seven out of ten doctors regarded medical representatives as essential or to some degree necessary, and about the same proportion regarded samples as useful or very useful.

In 1965, 46 per cent. of the general practitioners interviewed were aware of the existence of the A.B.P.I. code of marketing practice, against only 36 per cent. in 1964. The proportion of doctors who could describe any instances which they considered should have been prevented by the code fell from 27 per cent. to 11 per cent.

cessful to date. Speaker at the meeting was SIR MORTIMER WHEELER who, in an illustrated talk on "Digging up the Past," dealt with the discovery of the earliest known man and traced his evolution up to the first known agrarian community in Jericho.

## ROMFORD

### Silver Jubilee

ROMFORD Branch of the Pharmaceutical Society is celebrating during the Branch year 1966-67 the silver jubilee of its independent existence. Before the Branch was formed its area came within that of the East Metropolitan Branch. To mark the anniversary a suggestion put forward by the chairman (Mr. R. E. Frizzell) has been adopted and a special fund has been opened to collect a donation of £275 (£1 per member) for the Birdsgrove House Fund. The fund is intended to be additional to the Branch's customary efforts to support the Benevolent Fund and the treasurer is making arrangements for subscriptions to be paid by instalments.

### Medicines—with Care"

#### Exhibition

AFTER an extended provincial tour the Pharmaceutical Society's "Medicines—with Care" exhibition, appropriately supplemented, has been back in London, from which it set off about a year ago after a preview at the Society's headquarters. Recently at Islington, it had its next showing at Romford where it was given a civic and official send-off on July 18. The mayor (COUNCILLOR DIX) of the London Borough of Havering, of which Romford now forms part, said the dual purposes of the event were to direct attention both to the need for care in handling medicinal substances and to the town's "surrender" week, with its nine depôts at which unwanted medicines could be left for disposal. At Oldchurch hospital in the borough, said the mayor, 800 patients a year had been treated for poisoning since 1962, and since January 1966 seventy-seven patients had been treated for aspirin poisoning, twenty of them children under five. No wonder the problem was a national "nightmare." MR. ALLEN ALDINGTON gave the latest national figures — a death a week from aspirin and a death a day from barbiturates. The exhibition was part of a crusade by the Society to demonstrate that medicines were not ordinary merchandise. The Branch chairman (MR. R. E. FRIZZELL) spoke of the hard work members had put into organising the event, especially in arranging a poster contest among local school-children and a quiz competition—in which the winner was 12-year-old Linda Hakes. The exhibition remained open for the remainder of the week. Posters advertised it around the town.

## EXPANSION PROJECTS

A NEW factory has been acquired by Clairiol, Ltd., at Langley, Bucks. The factory premises, situated on a 4½-acre site will become the manufacturing, distribution and administrative headquarters of the company.

## PRODUCT STORAGE

### N.P.U. issues information leaflet

PHARMACISTS keeping any quantity of biological products should regard a refrigerator as an essential piece of apparatus. That advice is contained in the latest information leaflet published by the National Pharmaceutical Union entitled 'Storage of Biological Products.' It was compiled in collaboration with the Medical Research Council, the Department of Pharmaceutical Sciences of the Pharmaceutical Society, the Guild of Public Pharmacists and the Association of the British Pharmaceutical Industry.

#### To Alert Distributors

The purpose of the leaflet is to alert those responsible for the distribution of vaccines, sera and insulins to the importance of keeping such preparations under the best possible storage conditions at all times so as to avoid the serious loss of potency that can occur with such products. Storage conditions are set out for the following:—Vaccines and antitoxins; insulins; Actafrid Allpyral and Allergan extracts; B.C.G. freeze-dried vaccine; Bronchagen, canine leptospirosis vaccine; Ceporin; chorionic gonadotrophin; corticotrophin; corticotrophin injection; Cortico-gel; corticotrophin gelatin injection; corticotrophin zinc hydroxide injection; Decinase injection; Denco I.M. test; Dipropanex; Dick test toxin; Dornavac; Dublivax; Flubron; gonadotrophin L.H.; Haygen; heparin injection; hyaluronidase; Kavak; Kavol; Kavol plus; Lertigon; Lygranum; oxytocin injection; pituitary injection; polio vaccine oral; Pre-Karol; rabies vaccine; Rapitard; Schick test toxin; smallpox vaccine; thrombin topical; tuberculin old undiluted; tuberculin P.P.D. undiluted; U.C.G.2 pregnancy test (Crookes); Varidase injectable and topical; yellow fever vaccine. In addition storage conditions are given for the following products although they do not come within the category of biological products:—Aramine; Bovamast; Codelsol; Desferal; ergometrine injection; Fungizone; Keracid; Nystalin; Penidural; Phospholine iodide; Rovomycin; Scoline; streptomycin sul-

phate injections; suxamethonium chloride injection; Syntocinon; Thio-tepa; Velbe; viomycin P; viomycin sulphate; Vionactane. Whilst the leaflet is intended for circulation to retail pharmacists it is expected that suitably amended versions will be made available to hospital pharmacists and pharmaceutical wholesalers by the appropriate bodies. Spare copies of the leaflet may be obtained from the N.P.U., Mallinson House, 321 Chase Road, Southgate, N.14.

## BRANCH EVENTS

### SHROPSHIRE

#### Outdoor Theatre

THIRTY members and wives visited Ludlow on July 7 where they were received by the chairman and Mrs. Francis at the Feathers Hotel. After dinner the party proceeded to Ludlow Castle to see the Festival production of Shakespeare's "Much Ado About Nothing" in an outdoor production set against the background of the old castle walls. A fine, warm night made it a memorable occasion for those present it is reported.

### NORTHAMPTON

#### Car Rally

No less than 106 pharmacists and their friends took part in the annual car rally of the Northampton Branch of the Pharmaceutical Society on June 22. The event was again organised by Mr. and Mrs. R. Lemon, Long Buckby, and took the form of a "Signpost Point-to-Point" with questions to be answered en route. The run was followed by a buffet supper at the Spencer Arms hotel, Chapel Brampton. Proceeds are being sent to the Society's Benevolent Fund.

### SHEFFIELD

#### Evolution of Man

A RECORD attendance of about 500 was present at a joint meeting of the Sheffield Branch of the Pharmaceutical Society with medical, dental and optical associations on June 29. The meeting is reported to have been the most suc-



# Manufacturers' Problems of Formulation

## AN INDUSTRIAL PHARMACIST ADDRESSES ENFIELD BRANCH

THE evolution of a pharmaceutically and clinically acceptable presentation of a drug was described to a recent meeting of Enfield Chemists' Association by MR. K. A. LEES (head of pharmaceutical research and development, Glaxo Laboratories, Ltd.).

Formulation, he said, started at the isolation of a new compound with apparently useful pharmacological properties and lack of toxicity. Chemical and physical properties were investigated and, for paediatric preparation its taste and how bitterness, etc., could best be masked. At the clinical trial stage formulation problems began in earnest. A product for use all over the world must be so formulated so that it could be used in both Alaska and Aden, so an ointment would need a base with constant viscosity characteristics over a wide temperature range. Costs were kept down if it was universally acceptable. The formulation must not interfere with any assay method that might be developed. Long before clinical trials actually started, sample batches of products were made for storage tests, both normal and accelerated. It was normal to supply fresh trial material every three months or so, removing any unused stock to see if deterioration in actual use compared with the earlier data. After the United Kingdom trials came trials abroad. Eventually a formula was agreed upon and the product was marketed. Last stage in formulation was to find a suitable pack to ensure a satisfactory shelf life.

### Recent Advances in Technique

A recent striking advance had been in the coating of tablets. The conventional sugar coating had drawbacks, taking as long as four days to apply and usually doubling the core weight of a tablet. Press coating was much quicker but still produced a bulky tablet. A new film coating process took only an hour or so. Weight gain of the tablet was between 5 and 15 mgm. and the process could be carefully controlled. Tablets containing a thiazide and potassium chloride in an enteric-coated core had been shown to cause ulceration of the large bowel, probably owing to the release of potassium chloride, causing a high local concentration in the part of the gut where the enteric coating ruptured. His company had evolved a process whereby the small crystals of potassium chloride were given an individual film coating. The coated crystals were compressed into a tablet in which small particles of soluble potassium chloride were embedded in a slowly soluble film matrix. From that tablet the salt was slowly released over a number of hours, thus avoiding high concentration. That tablet was layered on to another to produce a thiazide/KCl combination. During the compression some of the film-coated granules on the outside of the tablet were ruptured giving it an unpleasant salty taste. A final film coating eliminated that trouble.

Mr. Lees told a questioner it was a fact that companies were unwilling to release supplies of the new active drug. New compounds were often complex, and it was often impracticable for the pharmacist in general practice to formulate his own preparations. Beta-methasone 17-valerate, for example, was unstable in the presence of alkali, metabisulphite or heavy metals, becoming betamethasone 21-valerate which,

though it had some activity, was less effective than the 17-valerate. As a reminder that B.P. standards were minimal and that the better pharmaceutical companies set standards well above those of the pharmacopoeia, Mr. Lees demonstrated two griseofulvin tablets both meeting B.P. specifications, one of which dispersed easily in water while the other demanded some mechanical aid.

## PHARMACY EDUCATION IN LIVERPOOL

### Plans and successes

DEVELOPMENTS at the department of pharmacy, Liverpool College of Technology, were referred to by MR. T. L. BOWYER (head of the department) at the recent annual prize-giving. Though most of the additional accommodation under phase II of the new building was now available, space was still inadequate for a modern school of pharmacy. Accommodation planned in phase III would provide a total area of more than 31,000 sq. ft., and it was proposed to start building in 1967. During the session a steady-state liquid/liquid countercurrent apparatus, and a Davies differential cathode ray polarograph had been added to the department, and closed-circuit television was now in use in the pharmacognosy laboratory.

Judged by examination results, the session had been a good one. In the diploma examination, Part I, the overall pass was 89 per cent.; in part II 95 per cent.; and in part III, 96 per cent. Results at first entry in parts I and II had been the best in the country.

Fourteen students had qualified for the College's Associateship award, two with honours. Three out of six candidates in the part I external B.Pharm., examination of London University had been successful. Of eleven students in the final year of the B.Sc. (Honours Pharmacology) course, four had gained a class 2, division 1, degree, four a class 2, division 2, degree, and three an ordinary degree. From September 1966 there would be a course leading to the ordinary degree of B.Sc. of the Council for National Academic Awards. There would be no further intake to the diploma course.

### Awards to Students

DR. F. HARTLEY (dean of the school of pharmacy, University of London), presented the prizes as follows:—

*First Year Students.* EVANS MEDICAL, LTD., PRIZE (pharmaceutics): Miss Hilary E. Johnston. AYRTON SAUNDERS & CO., LTD., PRIZE (physiology): J. R. Clitherow. BOOTS PURE DRUG CO., LTD., PRIZE (pharmaceutical chemistry): Miss Vivien Emery. TIMOTHY WHITES & TAYLORS, LTD., PRIZE (best all round student): P. S. Collier. NATIONAL ASSOCIATION OF WOMEN PHARMACISTS PRIZE (best "girl" student): Miss J. Ray.

*Second Year Students.* THE BRITISH DRUG HOUSES, LTD., PRIZE (pharmaceutics): Miss Geraldine D. Crisp and Miss Margaret A. E. Hughes (shared). GLAXO LABORATORIES, LTD., PRIZE (pharmaceutical chemistry (A)): Miss G. D. Crisp. BOOTS PURE DRUG CO., LTD.,

PRIZE (pharmaceutical chemistry (B)): Miss M. A. E. Hughes. TIMOTHY WHITES & TAYLORS, LTD., PRIZE (best all round student): Miss G. D. Crisp and Miss M. A. E. Hughes (shared). DISTA PRODUCTS, LTD., PRIZE (microbiology): Miss G. D. Crisp and Miss Vivienne Humphries (shared). E. R. SQUIBB & SONS, LTD., PRIZE (pharmacognosy): Miss G. D. Crisp and Miss V. Humphries (shared).

*Third Year Students.* FEIZER, LTD., PRIZE (pharmaceutics): Miss Carol E. Whittaker. MAY AND BAKER, LTD., PRIZE (pharmacology): E. B. Fairbrother and J. P. Jervis (shared). BOOTS PURE DRUG CO., LTD., PRIZE (pharmaceutical chemistry): J. P. Jervis. TIMOTHY WHITES & TAYLORS, LTD., PRIZE (best all round student): Miss Maureen J. Devenish and J. P. Jervis (shared). LIVERPOOL CHEMISTS ASSOCIATION PRIZE (forensic): G. S. Logan.

## A FACTORY IN NIGERIA

### Joint venture by two companies

A FACTORY operated by Wellcome-Lepetit (Nigeria), Ltd., a manufacturing company owned jointly by the Wellcome Foundation, Ltd., Great Britain and Lepetit, S.p.A., Italy, was officially opened on July 2 by Mr. B. N. Okagbue, Permanent Secretary, Ministry of Health, Lagos. Other guests at the opening were Professor H. O. Thomas (dean of the University of Lagos Medical School) and Mr. W. P. Daniel-Kalio (chairman, Western Nigeria Development Corporation), Dr. Fred Wrigley (overseas director, Wellcome Foundation, Ltd.) and Mr.



Professor H. Orishejotomi Thomas and Dr. Fred Wrigley at the official opening.

Roger R. Zoccolillo (managing director, Ledoga S.p.A.) represented the parent companies. Besides serving Nigeria, the factory is expected to export to other nations in West Africa at the same time serving as a training centre for Nigerians in pharmaceutical production. [In 1964 the Dow Chemical Co., U.S.A., acquired shareholdings in the parent company of Lepetit.]



## TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, JULY 20: Although the threat of dearer prices for imports of many commodities took a more serious turn during the week there was still no extra inquiry on the part of buyers to cover their requirements on a long-term basis. Prices were barely tested and in the main were repeated.

Alleppy green CARDAMOMS were quoted at 30s. per lb. on the spot against 32s. 6d. in the previous week. Zanzibar CHILLIES at 300s. cwt., c.i.f., were down 30s. for shipment with the availability of new crop. There was some easing in the price of African GINGER on the spot but Jamaican was unchanged. The market expect some change in NUTMEGS in the near future but meantime the old rates were quoted. PEPPERS were firm particularly in the forward position. Costa Rican IPECACUANHA for shipment was nominally 70s. lb., c.i.f. against a firm 67s. 6d. in the previous week. Only limited quantities of Tinnerally SENNA are arriving at the Indian godowns from the growing areas. The main reason given for the short supplies is that there has been a lack of rain; a secondary reason is reported to be the present export price which, the growers claim, is unattractive. June shipments from Tuti-corin were as follows:—

	U.K. Tons	U.S. Tons	Europe Tons
SENNA			
LEAVES ...	14	65	41
PODS ...	3	—	19

Ceylon CITRONELLA OIL was one penny per lb. lower at 4s. on the spot while PATCHOULI, which has been offered in increasing quantities lately, was down 10s. lb. On the other hand LEMONGRASS was dearer by 1s. 6d. per kilo on the spot and by sixpence for shipment.

### Pharmaceutical Chemicals

ACETIC ACID.—Per ton in bulk: B.P.C., glacial £80 to £84; 98–100 per cent., £76 to £80. Technical 80 per cent. grades: Pure £70 to £74; technical, £64 to £68. Small lots B.P.C., 5-gall. demijohn 16s. per gall.; 10 demijohns, 11s. per gall.

ACETYLALICYLIC ACID.—One-ton lots, 4s. 0½d. per lb.; 5-cwt., 4s. 5d.; 1-cwt., 4s. 8d.

p-AMINOSALICYLIC ACID.—SODIUM, 17s. 6d. per lb. for 1,000-kilo lots.

ANURINE.—HYDROCHLORIDE (per kilo) in one-kilo lots, 102s.; 10–99 kilos, 100s. per kilo. The MONONITRATE is 107s. and 104s. 6d. for similar quantities.

ASCORBIC ACID.—One kilo, 37s.; 10-kilos, 33s. 6d. per kilo; 25-kilos, 32s.

BENZOIC ACID.—One cwt., 2s. 10d. per lb.; SODIUM SALT, 2s. 7d. per lb.

BORIC ACID.—B.P. grade in 1-ton and upwards (per ton): Granular, £84; crystals, £97; powder, £90 10s.; extra-fine powder, £92 10s. per ton in lined hessian bags, carriage paid in Great Britain. Less £1 per ton if supplied in paper bags. Technical from £70 to £80 10s. per ton according to type and packing.

CALCIFEROL.—One-kilo lots are from 2s. 7½d. per gm. in standard packages.

CALCIUM PANTOTHENATE.—92s. 6d. per kilo for 1 to 9 kilo lots.

CITRIC ACID.—Domestic powder in bags, per cwt. 1–4-cwt. lots, 214s.; 5–19 cwt., 212s.; 1 ton, 208s. Crystals plus 10s. cwt. ANHYDROUS powder and granular plus 10 per cent.

CYANOCOBALAMIN.—100-gm. lots are 52s. 6d. per gm.

FOLIC ACID.—B.P. and U.S.P., 1-kilo lots, £19 7s. 6d. per kilo.

FUMARIC ACID.—Food grade in 5-cwt. lots is 227s. to 234s. per cwt.

GALLIC ACID.—B.P., 12s. 3d. per lb. for 1-cwt. lots; 5-cwt., 12s.

HYDROCHLORIC ACID.—B.P., from 28s. to 35s. per cwt. in carboys, ex works.

HYDROCYANIC ACID.—Dilute B.P.C. 1964, from 4s. 6d. to 5s. 5d. per kilo, as to quantity; Scheeles from 5s. 6d. to 6s. 3d.

HYDROXOCOBALAMIN.—For 100 gm. lots, 105s. per gm.

HYPOPHOSPHOROUS ACID.—B.P.C. 1959, 15s. 11d. per kilo; PURE (50 per cent.), 19s. 9d.

INOSITOL.—One kilo, 100s.; 10 kilos, 90s. per kilo.

LACTIC ACID.—B.P. is 5s. 3d. per lb. for 12-winchester lots and 4s. 4d. per lb. for 5-cwt. Edible, 80 per cent. acid, £317 per 1,000 kilos.

MANDELIC ACID.—One-cwt. lots, 12s. 6d. per lb. CALCIUM SALT, also 12s. 6d. SODIUM MANDELATE, 13s. and AMMONIUM MANDELATE 50 per cent. solution, 7s. 6d.

MENAPHTHONE.—(50-kilo lots). B.P. 112s. 6d. per kilo; ACETOMENAPHTHONE, B.P., 122s. 6d.; WATER-SOLUBLE (menadione sodium bisulphite), 81s.

NICOTINAMIDE.—(Per kilo). One kilo, 39s.; 10 kilos, 36s. 6d.; 50 kilos, 34s. 9d.

NICOTINIC ACID.—One kilo, 32s.; 10 kilos, 29s.; 50 kilos, 27s. per kilo. Feed grade, 21s. to 23s. kilo as to quantity.

NIKETHAMIDE.—50-kilo lots are 52s. 9d. per kilo.

OLEIC ACID.—B.P. grade, £188 10s. per ton, 1-gall. lots, 22s. 10d.

OXALIC ACID.—Imported material is about £200 per ton.

D-PANTHENOL.—One to 10 kilos, 200s. per kilo.

PHENOL.—Ice crystals in bulk, 1s. 4d. per lb. LIQUID, B.P., 1s. 9d. per lb. in 56-lb. returnable tins.

PHOSPHORIC ACID.—B.P. (s.g. 1.750) drums, 1s. 4d. per lb.; bottles from 5s. 1d. per kilo.

POTASH SULPHURATED.—Lump, B.P.C. 1959, 8s. 2d. per kilo in 50-kilo drums.

POTASSIUM ACETATE.—(Per lb.) 1-cwt. lots, 3s.; 5-cwt., 2s. 8d.; 10-cwt. 2s. 6d.

POTASSIUM BICARBONATE.—B.P. powder, 110s. per cwt. 1–4-cwt. lots and 105s. per cwt. for 5-cwt. and over.

POTASSIUM CARBONATE.—50-kilo kegs, 5s. 1d. per kilo.

POTASSIUM CHLORATE.—50-kilo cases, 5s. 6d. per kilo.

POTASSIUM CHLORIDE.—Pure 50-kilo sacks, 3s. 4d. per kilo.

POTASSIUM HYDROXIDE.—Pellets, B.P., 9s. 2d. per kilo; sticks, 15s. 5d.; technical flake, 4s. All 50-kilo lots.

POTASSIUM 8-HYDROXYQUINOLINE SULPHATE.—1-kilo is 55s. per kilo.

POTASSIUM NITRATE.—Pure in 50-kilo sacks, 2s. 1d. per kilo.

POTASSIUM PERMANGANATE.—B.P. in 1-cwt. lots, 2s. 0½d. per lb. Technical

218s. 6d. per cwt.; 1-ton lots, quoted at 207s. per cwt.

POTASSIUM PHOSPHATE.—B.P.C. 1949, 50-kilo kegs of powder, 8s. 3d. per kilo, GRANULAR, 8s. 9d.

POTASSIUM QUADROXALATE.—1-cwt. 3s. 6d. per lb.

POTASSIUM SULPHATE.—B.P.C. '49, 1s. 2d. per lb.

POTASSIUM THIOCYANATE.—50-kilo lots, 11s. 6d. per kilo in kegs.

PYRIDOXINE.—One kilo, £17 per kilo; 10 kilos, £16 15s. per kilo.

PYROGALLIC ACID.—One-cwt. photographic crystals, 29s. 3d. per lb.

RIBOFLAVINE.—One-kilo, 192s. 6d. and 10 kilos, 187s. 6d. per kilo. Feed-grade, minimum 96 per cent., 160s. and 155s. respectively.

SODIUM PANTOTHENATE.—Per kilo, 105s. for 1 to 9 kilo lots.

SULPHURIC ACID.—Pharmaceutical quality from 28s. to 35s. per cwt. in carboys ex works.

TANNIC ACID.—The B.P. fluffy, 9s. 9d. per lb. (5-cwt. lots) and powder, 9s. 6d.

TARTARIC ACID.—(In bags): 1-ton lots, 268s. per cwt.; 5–19 cwt., 283s.; 1 cwt., 285s. If supplied in drums add 8s. cwt.

THIOGLYCOLIC ACID.—Basic rates per lb. 97–98 per cent., 26-lb. packs, 15s.; 75 per cent., 11s. 6d. AMMONIUM THIOGLYCOLATE, 40 per cent., pH 9.3 (24-lb. packs), 6s. 8d.; MONOETHANOLAMINE THIOGLYCOLATE, pH 9.9 40 per cent., 9s. 10d. All carriage paid United Kingdom and subject to purchase tax.

### Industrial Chemicals, Solvents

ACETALDEHYDE. — The 100 per cent. is £122 per ton minimum 1-ton lots.

ACETATES. — Per ton, spot in drums: AMYL, technical, £251 and B.S.S., £253. BUTYL, £128; ETHYL, £103; ISOBUTYL (80 per cent.), £105 and pure, £108; ISOPROPYL, £110; METHYL, 80 per cent., £142.

ACETIC ANHYDRIDE. — 12-ton lots £103 per ton; 2½-ton, £107, tanker deliveries.

ACETONE. — One-ton lots spot £68 per ton in drums.

N-BUTYL ALCOHOL. — One-ton lots in drums, £123 per ton and one-drum lots, £132 per ton.

CARBON TETRACHLORIDE.—Four-ton lots, in drums, £84 per ton.

HYDROCHLORIC ACID.—Commercial grade £17 2s. 9d. per ton ex works, in carboys.

ISOPROPYL ALCOHOL. — Technical grade (99 per cent.) in tank car lots from 4s. 6d. to 4s. 8d. per gall.; anhydrous in drums, 7s. 1d. to 7s. 4½d. per gall.; in bulk, 6s. 11d. to 7s. 1d.

METHYL ETHYL KETONE. — One-ton lots, £103 per ton.

NAPHTHALENE. — Contract rates for large quantities of phthalic grade are from £24 per ton in bulk, ex works.

PHTHALATES. — Prices (per ton) one-ton lots in drums: Di-BUTYL, £153; Di-iso-BUTYL, £148; Di-ETHYL, £171; Di-METHYL, £161.

PHTHALIC ANHYDRIDE.—Domestic material ex contract, £93 5s. per ton.

SODA ASH. — Four-ton lots, from 330s. per ton delivered.

STEARATES.—Minimum 1-ton lots, ALUMINIUM (No. 1), £243 10s. per ton and (non-gel.), £281; CALCIUM (precipitated), £243 10s.; LEAD (30 per cent.), £245; MAGNESIUM (standard), £257 and (super-fine), £287. ZINC, £246 to £276 as to grade.



### Crude Drugs

ACONITE.—Spot, Spanish *napellus*, 2s. 4d. per lb.; shipment, 2s. 3d., c.i.f.

AGAR.—Kobé No. 1, 22s. 6d. per lb. in bond; shipment, 22s. 6d., c.i.f.

ALOE.—(Per cwt.). Cape primes, spot, 245s.; shipment, 240s., c.i.f. and Curaçao, 270s. spot shipment, 265s., c.i.f.

ANISE.—Chinese star, 150s. per cwt. spot, duty paid; f.a.q. for shipment, 120s., c.i.f.

ANNATTO.—Madras, f.a.q. seed, spot, 255s. per cwt.

BALSAMS.—(Per lb.): CANADA: Shipment, 27s. 6d., c.i.f.; spot, 27s. 6d. COPAIBA: B.P.C., spot, 13s.; shipment, 10s., c.i.f.; PERU: 16s., spot; shipment, 14s., c.i.f.; TOLU: B.P., from 12s. 6d.

BELLADONNA.—LEAVES, 6s. per lb., spot; shipment, 5s. 6d. c.i.f. HERB. 4s., spot. ROOT, 1s. 8d. per lb., spot; shipment, 1s. 7d., c.i.f.

BENZOIN.—Sumatra block, spot from £20 to £40 as to quality.

BUCHU.—Spot, 8s. 6d. per lb.; shipment, 7s. 6d., c.i.f.

CALUMBA.—Mozambique root, 125s. per cwt. spot.

CAMPHOR.—B.P. powder for shipment, 4s. 4½d. per lb., c.i.f.; spot, 5s. 9d., duty paid.

CARDAMOMS.—(Per lb.). Alleppy greens, 30s., spot and 21s. 6d., c.i.f. Prime seed for shipment, 32s., c.i.f.

CASCARA.—Spot, 245s. per cwt.; shipment, 245s., c.i.f., nominal.

CASSIA.—*Lignea*, whole for shipment, 230s. cwt., c.i.f.; spot, 300s., duty paid.

CHAMOMILE.—Belgian flowers, 15s. to 16s. per lb., spot; German type, 7s. 6d.

CHERRY BARK.—Thin natural, 2s. 6d. per lb.; shipment, 2s. 4d., c.i.f.

CHILLIES.—Zanzibar, spot, 380s. per cwt.; shipment, 300s., c.i.f.; Mombasa, 485s., spot; shipment, 350s., c.i.f.

CINCHONA.—Ecuador bark, 8-07 per cent. t.a., offered at 2s. 6d. to 2s. 9d. per lb. as to quantity.

CINNAMON.—BARK, Seychelles, 140s. cwt spot; shipment, 114s., c.i.f.; OUILLS Ceylon (per lb., c.i.f.); Five O's, 10s. 6d.; seconds, 8s. 9d.; quillings, 4s. 11d.

CLOVES.—Zanzibar, standard grade, spot quoted at 2s. 10½d. per lb.; shipment, 2s. 7½d. c.i.f.

COCHINEAL.—(Per lb.). Canary Isle silver-grey, 16s. spot, 15s. c.i.f.; black-brilliant, 18s., spot, 17s., c.i.f. Peruvian silver-grey, 13s. 3d., spot.

COCILLANA.—Bark, 3s. per lb.

COLOCYNTH PULP.—Spot offered at 4s. 3d. per lb., shipment, 4s. c.i.f.

ELEMI.—Spot, 1s. 7d. per lb.; shipment, 1s. 5d., c.i.f.

ERGOT.—Portuguese—Spanish, spot, 12s. per lb.; shipment, 11s. 6d., c.i.f., nominal. Continental, 9s., spot.

GENTIAN.—Root, 195s. per cwt. spot; shipment, 190s., c.i.f.

GINGER.—(Per cwt.). Nigerian split, 80s., spot, 65s., c.i.f.; peeled, 190s., spot, 165s., c.i.f. African, spot, 230s., shipment, 210s., c.i.f. Jamaican No. 3, spot, 280s., shipment, 230s., c.i.f.; Cochinchina, spot, 245s.; shipment, 182s. 6d., c.i.f.

GUM ACACIA.—Kordofan cleaned sorts, 170s. per cwt., spot; shipment, 156s. c.i.f.

HONEY.—(Per cwt.). Australian light amber, spot, 120s. to 125s.; and medium amber, 110s. to 115s. Argentine, 125s. to 130s.; Canadian, 175s. to 180s.; Mexican spot, 110s. to 115s.

IPECACUANHA.—Matto Grosso for shipment, 53s. 6d. per lb., c.i.f. and spot, 56s. Costa Rican, 74s. 6d., spot; shipment, nominally 70s., c.i.f. Colombian, shipment, 57s. 6d. nominal.

JALAP.—Mexican whole bulbs, 4s. 6d. per lb. on spot; shipment, 4s. 3d. c.i.f. Brazilian, 1s. 7d., c.i.f.

KARAYA.—No. 1 f.a.q. gum, spot, 415s.; No. 2, 300s. per cwt.

KOLA NUTS.—West African halves are 8d. per lb. on the spot; shipment, 7d. c.i.f.

LANOLIN.—ANHYDROUS, B.P., is from 2s. 4½d. to 2s. 8d. per lb. in 1-ton lots delivered free drums. Commercial grades from 1s. 7½d.

LEMON PEEL.—Spot, 1s. 9d. per lb.; partially extracted, 1s.

LIME FLOWERS.—Spot short at 2s. 2d. per lb.

LIQUORICE.—Natural root: Russian, 67s. 6d. per cwt.; Anatolian, 57s. 6d.; Anatolian decorticated, 170s. Block juice: Anatolian, 210s. to 220s. per cwt.; Italian stick from 395s. to 460s. per cwt.

LOBELIA.—Dutch on the spot, 4s. 9d. per lb.; shipment, 4s. 6d. c.i.f. American, 13s. per lb. spot.

LYCOPodium.—Indian triple-sifted, 8s. 6d. per lb., spot.

MACE.—Whole No. 1, 15s. per lb., f.o.b. for forward delivery.

MENTHOL.—(Per lb.). Chinese for shipment, 33s. 3d., c.i.f.; spot, 38s. duty paid Brazilian for shipment, 37s. 6d., c.i.f.; spot, 39s., duty paid.

MERCURY.—Spot from £125 to £135 per flask of 76-lb., ex warehouse.

NUTMEGS.—(Per lb.). West Indian, spot, defectives, 8s. 3d.; sound unassorted, 10s. East Indian for shipment b.w.p., 4s. 3d.; 110's, 8s. 6d.; 80's, 9s. 10½d.; all c.i.f.

NUX VOMICA.—Cochin, 110s. per cwt. on the spot; shipment, 80s., c.i.f.

ORANGE PEEL.—Spot: Sweet ribbon, 1s. 8d. per lb., bitter quarters: West Indian, 10½d.; Spanish, 1s. 9d.

PEPPER.—White Sarawak, 3s. 11½d. lb., spot; shipment, 3s. 10d., c.i.f. Black Sarawak, 3s. 4d., spot nominal; shipment, 2s. 11½d., c.i.f. Black Malabar spot not available shipment, 330s. cwt., c.i.f.

PODOPHYLLUM.—Spot per cwt.: *Emodi* 210s., spot; shipment, 185s., c.i.f.

QUILLAIA.—Spot 180s. per cwt., shipment; 175s., c.i.f.

RHUBARB.—Various grades offered at from 6s. to 19s. 6d. per lb. spot.

SEEDS.—(per cwt.). ANISE.—Spanish, 240s.; Turkish, 182s. 6d., both duty paid. CARAWAY.—Dutch, 162s. 6d., spot. CELERY.—Indian, 162s. 6d., spot; shipment, 137s. 6d., c.i.f. CORIANDER.—Rumanian whole seed, 85s.; splinters, 77s. 6d., both duty paid. CUMIN.—Cyprian, 300s.; Indian, 290s.; Syrian, 290s. in bond; Iranian for shipment quoted at 210s., c.i.f. DILL.—Indian, 130s., spot; shipment, 90s., c.i.f. FENNEL.—Chinese, 125s., duty paid and 112s. 6d., c.i.f.; Indian, 130s., c.i.f. FENUGREEK.—Moroccan in short supply on spot, 77s. 6d., duty paid; shipment, 67s. 6d., c.i.f. MUSTARD.—English, 65s. to 100s. according to quality.

SENNA.—(Per lb.). Tinnevely LEAVES spot; Prime No. 1, 2s. 3d.; No. 3, f.a.q., 1s. 2d. Shipment: No. 3, 1s. 0½d., c.i.f. PODS: Tinnevely hand-picked virtually unobtainable on spot; manufacturing, 1s. 2d. shipment, 1s. 1½d., c.i.f. Alexandria PODS: Hand-picked spot, 5s. 3d. to 7s.; manufacturing, forward, 2s. 1d.; c.i.f.; spot, 2s. 6d.

TURMERIC.—Madras finger 112s. 6d. per cwt. spot; shipment, 85s., c.i.f.

WAXES.—(Per cwt.). BEES'—Dar-es-Salaam, 450s., shipment, 430s., c.i.f. Sudanese, spot, 410s., in bond nominal; shipment, 390s., c.i.f., nominal. CANDELLA, spot, 465s.; forward, 460s., landed. CARNAUBA, fatty grey, spot, 275s.; shipment, 250s., c.i.f.; prime yellow spot, 555s.; shipment, 445s., c.i.f.

WITCH HAZEL LEAVES.—Spot quotations are 4s. 3d. per lb. nominal; prompt shipment, 4s., c.i.f.

### Essential and Expressed Oils

ALMOND.—Spanish sweet oil is 6s. 6d. per lb. spot.

AMBER.—Rectified on the spot, 1s. 6d. per lb.

ANISE.—Chinese, 9s. 4d., spot, shipment, 8s. 11d., c.i.f.

BAY.—From 41s. per lb. on the spot.

BERGAMOT.—Spot, from 167s. per lb. for 35 per cent.

BIRCH TAR.—Rectified 10s. per lb. on the spot.

CARAWAY.—Imported from 56s.; English distilled from 70s. per lb.

CARDAMOM.—Imported, 540s. per lb.; English distilled, 950s.

CASSIA.—Spot from 30s. to 35s. per lb. for 80-85 per cent.

CASTOR.—Home produced B.P. oil, spot, £140 per ton naked ex mill (2-ton lots).

CEDARWOOD.—American from 7s. 6d. per lb. on the spot; East African, 8s. 6d.

CELERY SEED.—Indian, 100s. per lb.; English, 200s.

CHENOPodium.—From 38s. per lb.

CINNAMON.—English-distilled, 50s. per oz.; other B.P. oils from 22s. to 130s. per lb. Ceylon leaf, 25s.; Seychelles leaf rectified from 9s., spot.

CITRONELLA.—Ceylon, spot, 4s.; shipment, 3s. 9d. per lb., c.i.f.; Formosan, 4s. 6d. in bond and 4s. 10½d., c.i.f. Chinese, 4s. 1½d. in bond; 4s., c.i.f.

COD-LIVER.—B.P. in 45-gall. drums is 12s. per gall. plus 30s. deposit on drum. Veterinary is from 9s. 10d. per gall. 25-stone lots. Delivered terms.

CORIANDER.—From 40s. per lb. spot.

CUBE.—Spot supplies of English are 90s. per lb.

GINGER.—Imported (per lb.): Indian, 165s.; Chinese, 75s.; Jamaican, 132s. 6d.

JUNIPER.—B.P.C. is 32s. 6d. per lb.

JUNIPER WOOD.—From 6s. per lb.

LAVANDIN.—From 28s. to 32s. 6d. per lb. as to quality.

LAVER.—French from 40s. to 60s. per lb. as to quality.

LEMONGRASS.—Spot, 25s. per kilo; shipment, 24s., c.i.f.

PATCHOULI.—Spot 100s. per lb. duty paid; shipment, 90s., c.i.f.

PEPPERMINT.—(Per lb.). *Arvensis*: Chinese for shipment, 13s., c.i.f.; spot, 12s. 9d. Brazilian for shipment, 13s., c.i.f.; spot, 13s. *Piperita*: Italian spot, 72s.; forward shipment, 82s. 6d. American from 39s. to 49s., as to source.

PENNYROYAL.—Spot, 15s. per lb. duty paid; forward shipment offers at 17s., duty paid.

PETITGRAIN.—Paraguay for shipment, 13s. 9d., c.i.f.; spot, 14s. 3d. per lb.

PIMENTO.—Imported BERRY, 110s.; English distilled, 385s.; LRAF, 24s. per lb.

PINE.—*Punilionis*, 20s. per lb., *sylvestris*, 8s.; abietis, 14s.

ROSEMARY.—Spanish, 12s. per lb., duty paid.

RUE.—Spanish unobtainable on the spot.

### UNITED STATES REPORT

NEW YORK, JULY 19: Among CRUDE DRUGS, WITCH HAZEL gained ten cents to 40 cents per lb. and Brazilian MENTHOL firmed up to \$5.85 per lb., a 15 cent advance. News from Brazil indicates that supplies of crude PEPPERMINT OIL have been dwindling due to recent heavy demand. Meanwhile the American oil was cheaper, with natural at \$6 per lb., down 35 cents and the redistilled, \$6.50 down 35 cents.



## TRADE MARKS

APPLICATIONS ADVERTISED  
BEFORE REGISTRATION

"Trade Marks Journal," July 13, No. 4585

For chemical products used in industry, science and photography; etc. (1)

Device with letter H, B887,897, by Hanimex (U.K.), Ltd., London, S.E.1.

For photographic products (1) and for scientific apparatus and instruments; photographic, cinematographic and optical apparatus and instruments; etc. (9)

EDOS, 889,235, 88,237, by Engineering and D. O. Services, Ltd., Maidenhead, Berks.

For preparations for colouring, dyeing or tinting the hair to make it blonde (3)

ELIDA NATURE'S BLONDES, 877,460, by Unilever, Ltd., Port Sunlight, Ches.

For perfumes, toilet preparations (non-medicated), cosmetic preparations, depilatory preparations, toilet articles, preparations for the hair, and soaps (3)

IMEDIA SELECTION TRAITANT, 884,585, by L'Oreal, Paris, France.

For hair lotions containing pilocarpine (3)

PETROCARPINE, 885,096, by Inter-Alia Pharmaceutical Services, Ltd., London, E.12.

For perfumes and preparations for the hair (3)

TOUCH OF THE SUN, B886,412, by Fisons Pharmaceuticals, Ltd., Loughborough, Leics.

For non-medicated toilet preparations, all containing menthol and all for use by men (3)

MENNEN MENTHOL ICED, 887,508, by Mennen Co., Morris Township, New Jersey, U.S.A.

For cosmetic preparations, non-medicated toilet preparations, and preparations for the hair (3)

RIFFENE, 888,457, by Organon Laboratories, Ltd., Morden, Surrey.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles, sachets for use in waving the hair, shampoos, and soaps (3)

GLIXENE, 889,658, by London Co-operative Chemists, Ltd., London, E.15.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles, shampoos, soaps, and essential oils (3)

CASAQUE, 890,619, ROYAL SECRET, 890,621, by Sidney Margolis, Ltd., London, S.E.17.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles, sachets for use in waving the hair, shampoos, soaps and essential oils (3)

LEOPARD, 890,758, by Yardley & Co., Ltd., London, E.15. STETSON 891,026, by Beecham Group, Ltd., Brentford, Middlesex.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles, sachets for use in waving the hair, shampoos, soaps and essential oils (3) and for deodorants (5)

BRYL, B878,132-33, by Beecham Group, Ltd., Brentford, Middlesex.

For detergents and cleaning preparations, all for dairy use (3) and for udder washes for dairy cattle, being veterinary preparations (5)

BACTERITE, 882,644-45, by Hadleigh-Crowther, Ltd., Reading, Berks.

For perfumes, eau de Cologne; moisturising preparations for toilet or cosmetic purposes; dentifrices, toilet articles, soaps and essential oils (3) and for medicated moisturising preparations for the treatment of the skin (5)

MOISTURE VEIL, B885,480-81, by Coty (England), Ltd., London, W.1.

For non-medicated toilet and cosmetic preparations for the care of the skin (3) and for pharmaceutical preparations and substances for use in treatment of the skin; and deodorants (5)

PRE-DEP, 889,081, B889,082, by Dae Health Laboratories, Ltd., London, W.1.

## PATENTS

COMPLETE SPECIFICATIONS ACCEPTED  
From the "Official Journal (Patents)," July 13

Process for the preparation of adiponitrile. Asahi Kasei Kogyo, K.K. 1,039,744.

Production of zinc oxide. Imperial Smelting Co., Ltd. 1,039,762.

Process for manufacturing organic fertilizer. A. L. Marks. 1,039,854.

Process for the desulphurization of pyridine and its homologues. Leuna-Werke Walter Ulbricht Veb. 1,039,856.

Viewfinder for photographic camera. Voigtlander, A.G. 1,039,865.

Process for the production of hydroxylamine. Inventa, A.G. für Forschung und Patentverwertung. 1,039,866.

Trifluoroalkoxy-substituted anilides and germicidal compositions obtained therewith. H. C. Stecker. 1,039,872.

Isoquinoline derivatives. Laboratoire Roger Bellon. 1,039,874.

Photographic 3-pyrazolidinone developing agents. Ilford, Ltd. 1,039,875.

Acylamino-pyrazolones and colour photographic materials containing them. Agfa, Ltd. 1,039,880.

Trihiacyclopentane derivatives. Farbenfabriken Bayer, A.G. 1,039,925.

Alkyl formamides and nematic agents containing the same. Schering, A.G. 1,039,930.

Perhaloacetone cyanohydrin derivatives. Allied Chemical Corporation. 1,039,946.

Process for the preparation of aldehydes and ketones. Rhone-Poulenc, S.A. 1,039,950.

Electric shaver with trimmer. Sunbeam Corporation. 1,039,958.

Pyrazole derivatives. Du Pont de Nemours & Co., E.I. 1,039,963.

Colour couplers for photographic images. Gevaert Photoproducten, 1,039,965.

Tris-amino-S-triazines, their production and use. J. R. Geigy, A.G. 1,039,968.

Process for the production of optically-active hydantoin derivatives. Farbenfabriken Bayer, A.G. 1,039,969.

Polynuclear araliphatic isonitriles. Farbenfabriken Bayer, A.G. 1,039,970.

Fertilizers containing ammonium phosphate. Imperial Chemical Industries, Ltd. 1,039,973.

Soap foam compositions. Shulton, Inc. 1,040,009.

British patent specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, on or after August 24.

## PRINT AND PUBLICITY



**SHAVES STAND:** A new shaver stand available from Sunbeam Electric, Ltd., 61 Pall Mall, London, S.W.1, holds one 777 Shave-master shaver in its open case. The display stand, which folds flat, is in bronze blue and silver.

## WORLD TRADE

**Japanese Acid Centre Opening Delayed.**—The establishment by Japan of a proposed 'Sulphuric Acid Centre' is being postponed until 1968 owing to poor prospects for imports of sulphur from the United States and Canada, said the Japanese Ministry of International Trade and Industry on July 7. The Ministry had planned to build the Centre (capacity 1,000 tons a day) in Western Japan by mid-1967. Earlier this year the Ministry ordered an investigation into Japanese imports of sulphur from the United States and Canada. It revealed a tight local supply position.

**Anglo-East German Quotas.**—The Confederation of British Industry have announced that a revised arrangement has been concluded between them and the East German Chamber of Foreign Trade providing, in many cases, for a greater volume of imports during 1966. The value of licences already issued under the earlier arrangements for 1966 will be set against the revised quotas. The revised quota list for 1966 provides for imports from East Germany of photographic apparatus to the value of £450,000, c.i.f. and of chemicals (including pharmaceutical chemicals), to the value of £600,000.

CONTEMPORARY  
THEMES

Subjects of contributions in current medical and technical publications.

ORGANOCHLORINE PESTICIDES in the atmosphere. *Nature*, July 16, p. 259.

TABLET TESTING INSTRUMENTS. *The Pharmacist*, May, p. 10.

α-METHYLDOPA. Incidence of a positive direct Coombs test in patients on, *Lancet*, July 16, p. 133.

α-METHYLDOPA therapy. Autoimmune haemolytic anaemia associated with, *Lancet*, July 16, p. 135.

ISOPRENALINE. Treatment of endotoxic shock with, *Lancet*, July 16, p. 143.

## COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

## Wednesday, July 27

MANCHESTER PHARMACEUTICAL GOLFING SOCIETY, Mere golf club, Mere, Knutsford, Ches. Medal competition for Woolley trophy and prize (ladies' day).

## Thursday, July 28

SWANSEA AND WEST GLAMORGAN BRANCH, PHARMACEUTICAL SOCIETY, Swansea Bay golf club, Jersey Marine, Shewen, at 9 a.m. Open golf meeting. (Proceeds in aid of Benevolent Fund). Details should be obtained from Mr. R. Penhallurick (telephone: Gowerston 2249).

## Exhibitions and Fairs

KODAK 'PHOTOGRAPHER OF THE MONTH'. Exhibition of photographs by Mr. D. Hills, Wokingham, at Kodak House, Kingsway, London, W.C.2. Daily during August (except Saturdays and Sundays), 9.30 a.m. to 5.30 p.m.

## Courses and Conferences

MEDICAL AUTOMATION, Post-graduate medical centre, Brighton, General Hospital, Brighton, Sussex. One-day course by Dr. L. C. Payne on automation and computers and their use in medicine. Ticket (price £3 3s.) from Dr. Payne, Shenley Grange, Shenley, Herts.



# Prescribers Press

What doctors are reading about developments in drugs and treatments

ASSOCIATION between methylodopa and hæmolytic anaemia is the subject of two papers from the Post-graduate Medical School, London. The first reports that forty-one (20 per cent.) of 202 hypertensive patients treated with methylodopa were shown to give a positive direct Coombs test (a serological agglutination test to detect a form of Rh antibody in the patients' red cells). None of the seventy-six hypertensive patients on other anti-hypertensive therapy showed the reaction. The incidence of a positive test was found to be dose-dependent: 9 per cent. of these on 1 gm. or less daily were affected; 19 per cent. of these on 1-2 gm. daily, and 36 per cent. of these on more than 2 gm. daily. In most instances the test became positive six to twelve months after starting treatment. No patient showed obvious hæmolytic anaemia, though a few with a positive test did have altered reticulocyte or platelet counts. In a comment on the paper, a *Lancet* leading article suggests that patients' blood should be

Coombs-tested in the seventh, and after the twelfth, month of treatment and, if a positive test be found, an alternative hypotensive drug should be substituted where possible. Patients who become pregnant or may need surgical operations should also be tested, as the presence of a positive Coombs reaction may make blood matching difficult. (*Lancet*, July 16, p. 133.)

THE apparent association between methylodopa and hæmolytic anaemia was the subject of a warning by the Committee on Safety of Drugs in January and some of the patients notified have been studied at the Post-graduate Medical School. Among thirty patients who developed the anaemia, two died while still anæmic and three after recovery from a hæmolytic episode. Anaemia appeared between three and thirty-seven months after starting treatment within eighteen months in 60 per cent. The anaemia was found to be of the autoimmune type and a retrospective study of patients presenting with the particular type involved has shown that 25 per cent. were receiving methylodopa which "means that  $\alpha$ -methylodopa therapy and autoimmune hæmolytic anaemia must be causally related." Stopping the drug and/or giving steroids produced a rapid hæmatological remission in most patients. (*Lancet*, July 16, p. 135.)

## NEW COMPANIES

P.C. = Private Company. R.O. = Registered Office

ALEXANDER ORKNEY (CHEMISTS) LTD. (P.C.).—Registered in Edinburgh, Capital £1,000. Subscribers: J. N. T. White and Myra H. White, 28 Viewfield Road, Juniper Green, Edinburgh.

C. S. MANUFACTURING CO. (BRISTOL) LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in emery boards, orange sticks, etc. Subscribers: Raymond A. Withey and J. G. Hordec, R.O.: 5 Unity Street, Bristol, 1.

CUNDALL (CHEMIST), LTD. (P.C.).—Capital £1,000. Directors: Doris M. Cundall and Pauline A. Whitfield, M.P.S. R.O.: The Station Pharmacy, Nunthorpe, Middlesbrough.

GRATICMISCS CHEMISTS, LTD. (P.C.).—Capital £100. To carry on the business of chemists, etc. Subscribers: Jean Herbert and Thomas A. Herbert, 156 Strand, London W.C.2.

MATOC (LABORATORIES), LTD. (P.C.).—Capital £100. To carry on the business of chemists, druggists and manufacturers of and dealers in pharmaceutical and other preparations, etc. Subscribers: Stanley H. Davis and David Ordish, R.O.: 1 Booth Street, Manchester, 2.

PROTECTEX CHEMICALS, LTD. (P.C.).—Capital £100. Subscribers: Stanley H. Davis and David Ordish, R.O.: 4 Woodland Drive, Fulwood, Preston.

SALFREX, LTD. (P.C.).—Capital £100. To carry on the business of chemists, etc. Subscribers: Leonard H. Lewis and Francis A. Dean, R.O.: 6 Surrey Street, London W.C.2.

## COMMERCIAL TELEVISION

The information given in the table is of number of appearances and total screen time in seconds. Thus 7/105 means that the advertiser's announcement will, during the week covered, be screened seven times and for a total of 105 seconds.

Period July 24 — 30

PRODUCT	London	Midland	North	Scotland	Wales & West	South	North-east	Anglia	Ulster	Westward	Border	Grampian	Eireann	Channel Is.
4711 eau de Cologne ..	2/30	2/30	2/30	1/15	2/30	2/30	1/15	2/30	1/15	—	—	—	—	—
Alka-Seltzer ..	5/200	5/200	5/200	5/200	8/300	5/200	8/300	5/200	5/200	5/200	5/200	5/200	5/200	5/200
Anadin ..	2/60	6/144	4/120	2/70	7/105	2/60	7/141	9/125	8/145	1/30	2/60	2/60	—	—
Anne French cleansing milk	—	—	—	—	—	2/60	—	—	—	—	—	—	—	—
Arrid deodorant ..	1/30	—	—	—	—	—	—	—	—	—	—	—	—	—
Askit powders and tablets ..	—	—	—	7/49	—	—	—	—	—	—	3/21	2/14	—	—
Bisodol ..	—	—	4/28	—	—	—	—	—	—	—	—	—	—	—
Carnation range ..	2/14	1/7	2/14	1/7	1/7	2/14	2/14	2/14	1/7	—	—	—	—	—
Centrin tablets ..	—	—	—	—	—	—	—	3/90	—	—	—	—	—	—
Clinic shampoo ..	4/120	4/120	3/90	2/60	4/120	2/60	3/90	2/60	2/60	2/60	5/150	2/60	—	2/60
Dentu-Creme ..	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	—	1/30
Dettol ..	3/135	1/45	1/45	1/45	—	1/45	—	—	—	—	—	—	—	1/45
Disprin ..	2/30	2/30	2/30	1/15	—	1/15	—	—	—	—	2/30	—	—	1/15
Entero-Vioform ..	3/90	—	—	—	—	5/127	—	—	—	—	—	—	—	—
Erasmic Superfoam ..	4/28	—	4/29	4/28	—	4/28	4/28	—	—	—	—	—	—	—
Eucryl smokers' toothpowder	—	2/30	2/30	2/30	—	2/30	2/30	—	—	—	—	—	—	—
Eutbomyl toothpaste ..	—	—	—	1/30	1/40	1/30	1/40	—	1/30	1/30	3/90	1/40	—	—
Haze ..	1/15	3/45	2/30	—	1/15	1/15	3/45	—	1/15	1/15	2/30	1/15	—	1/15
Immac ..	3/90	2/60	3/90	1/30	6/65	3/90	2/60	2/60	3/90	1/30	5/25	2/60	—	1/30
Imperial Leather ..	3/90	4/120	5/130	4/120	3/90	2/60	4/120	3/90	3/90	3/90	3/90	4/120	—	—
Ingrams shaving cream ..	1/30	1/30	1/30	—	—	—	—	—	—	—	—	—	—	—
Loxene shampoo ..	2/60	1/30	1/30	2/60	2/60	1/30	1/30	2/60	1/30	1/30	1/30	2/60	3/90	—
Maybelline eye cosmetics	—	—	—	—	2/60	—	—	—	—	—	—	—	—	—
Moorland indigestion tablets	—	—	—	—	—	—	—	1/45	—	—	—	—	—	—
Mum Rollette ..	2/37	4/74	1/30	2/37	3/67	4/74	1/7	3/44	3/67	2/37	2/14	2/14	—	—
Nivea ..	3/75	5/135	3/75	4/120	3/45	3/75	4/120	2/60	6/175	5/135	6/120	5/135	—	3/75
Poli-Grip ..	2/60	2/60	2/60	2/60	2/60	—	—	2/60	—	2/60	2/60	2/60	—	2/60
Rinstead pastilles ..	—	—	—	—	—	2/30	—	—	—	—	—	—	—	2/60
San Izal bleach ..	—	—	3/30	—	—	3/30	—	—	—	—	—	—	—	2/60
Signal toothpaste ..	5/225	2/90	3/135	2/90	2/90	2/90	2/90	3/135	3/135	2/90	4/180	3/135	—	3/135
SR toothpaste ..	4/120	4/120	4/120	5/150	5/150	5/150	3/90	3/90	3/90	2/60	3/90	3/90	—	2/60
Steradent ..	4/120	2/60	3/90	4/120	2/60	2/60	4/120	2/60	4/120	3/90	2/60	2/60	—	4/120
Stera-fix ..	—	—	2/30	—	1/15	—	—	—	—	—	—	—	—	—
Sunsilk shampoo ..	3/135	5/225	3/135	3/135	—	—	5/225	—	—	—	—	—	—	—
Sure deodorant ..	4/120	3/90	5/150	3/90	3/90	2/60	5/150	3/90	2/60	2/60	3/90	2/60	—	2/60
Vitalis ..	—	—	1/45	1/7	2/52	2/90	2/52	2/52	2/90	2/90	2/52	2/52	—	—
Vitapointe hairspray ..	3/90	2/60	3/90	2/60	2/60	3/90	2/60	2/60	2/60	2/60	—	2/60	—	1/30
Vitapointe shampoo ..	3/90	3/90	3/90	2/60	3/90	3/90	4/120	2/60	4/120	2/60	1/30	1/30	—	2/60
Zal disinfectant ..	2/30	2/30	2/30	2/30	2/30	2/30	3/30	2/30	3/30	1/30	2/30	2/30	—	3/30
Wright's coal tar soap ..	—	—	—	—	1/15	—	—	1/15	—	1/15	—	—	—	—



July 23, 1966

# cumulative price changes

AMENDING C & D  
QUARTERLY PRICE LIST  
FOR JUNE 1966

Day (705 Kirby)					
slimmer treatment	36 0	9 0	5 9		
Bore (976 P5&T)					
suntan cream	58 8	14 0	8 6		
No. 22 (247 Chanel)					
perfume spray	—	—	60 0		
refill	—	—	37 6		
I (1113 5&8)					
eau de Cologne					
original shape					
No. 11	445 9	111 5	65 0		
No. 812	322 3	80 7	47 0		
No. 9119	205 9	51 5	30 0		
No. 815	133 9	33 5	19 6		
No. 816	72 0	18 0	10 6		
No. 15W	147 5	36 10	21 6		
No. 16W	85 9	21 5	12 6		
No. 828	27 5	6 10	4 0		
trial size					
watch shape					
No. 843	41 2	10 3½	6 0		
flat shape in carton					
No. 127/T	54 10	13 8½	8 0		
flat shape in wicker					
No. 127/W	60 0	15 0	8 9		
decanter	No. 554	240 0	60 0	35 0	
spray set	No. 782	133 9	33 5	19 6	
bath cubes					
No. 9115/8	34 3	8 7	5 0		
hand cream					
No. 9107	20 7	5 1½	3 0		
matte creme tube					
No. 9105/12	13 2	3 3½	1 11		
No. 5055	22 3	5 7	3 3		
jar					
No. 9110/13	41 2	10 3½	6 0		
soap (3)	No. 8859	66 10	16 8½	9 9	
solid Cologne					
No. 1100	37 9	9 5	5 6		
talcum	No. 5316	30 10	7 8½	4 6	
cleansing tissues					
No. 210	17 2	4 3½	2 6		
eau de Cologne					
original shape					
No. 10	720 0	180 0	105 0		
mini-bottle					
No. 19/D	17 2	4 3½	2 6		
square shape					
No. 14/W	222 10	55 8½	32 6		
spray set	No. 740	240 0	60 0	35 0	
wicker	No. 1	—	—	—	
cortyl-A (1176 5quibb)					
cream with graneodin					
50gm	—	—	—	—	
cortyl-E (1176 5quibb)					
lotion					
cortyl-EG (1176 5quibb)					
lotion					
facolour (16 AGL)					
negative film CN17 special					
35mm standard					
cassette 20 exp.	—	—	10 6		
12 exp.	—	—	8 6		
Rapid	—	—	9 8		
roll film 127, 120	—	—	—		
and 620	—	—	9 0		
falux (16 AGL)					
flashcube-gun	—	—	53 0		
addin (24 ALAD) existing entry					
addin (24 ALAD)					
vacuum flasks					
Escort	16oz	—	7 11		
32oz	—	—	12 5		
Wide Mouth	16oz	—	15 3		
32oz	—	—	19 1		
Continental	16oz	—	7 11		
32oz	—	—	12 5		
Pitcher	32oz	—	28 9		
sparers					
refills for Escort and Continental					
16oz	—	—	4 0		
32oz	—	—	7 0		
for Wide Mouth	16oz	—	7 9		
for Wide Mouth	32oz	—	10 6		
and Pitcher 32oz	—	—	—		

stoppers for Escort and Continental					
16oz	—	—	2 0		
32oz	—	—	2 6		
for Wide Mouth					
16oz & 32oz	—	—	3 0		
for Pitcher white					
or beige	32oz	—	3 6		
cups for Escort and Continental					
16oz	—	—	1 0		
32oz	—	—	1 6		
for Wide Mouth					
16oz & 32oz	—	—	2 0		
cups for Pitcher white or					
desert tan	32oz	—	2 6		
Albamycin T (1263 Upjohn) T5					
capsules 250 mgm					
16	19	6ea	—		
100	117	4ea	—		
paediatric	60 mils	9	4ea	—	
Alexa (1545 Vestric)					
plastic occlusive dressings					
arm sleeve					
small	OD/1	12 9	—	1 5	
large	OD/2	18 9	—	2 1	
leg sleeve					
small	OD/3	18 9	—	2 1	
medium	OD/4	21 9	—	2 5	
large	OD/5	30 9	—	3 5	
foot pad	OD/6	23 3	—	2 7	
torso vest					
child	OD/20	121 6	12 2	14 6	
junior	OD/21	126 0	12 7	15 0	
adult	OD/7	129 9	13 0	15 6	
trousers					
child	OD/22	148 6	15 0	17 9	
junior	OD/23	153 0	15 4	18 3	
small	OD/8	162 0	16 3	19 3	
medium	OD/9	180 0	18 0	21 6	
large	OD/10	198 0	19 10	23 6	
shorts					
child	OD/24	85 6	8 7	10 3	
junior	OD/25	90 0	9 0	10 9	
small	OD/11	94 6	9 6	11 3	
medium	OD/12	94 6	9 6	11 3	
large	OD/13	101 6	10 2	12 0	
gloves					
med. 25	OD/14	42 0	4 0	5 7	
100	OD/14	148 0	15 0	19 9	
large 25	OD/15	42 0	4 0	5 7	
100	OD/15	148 0	15 0	19 9	
Allibee (1071 Robins)					
capsules with vit. C	100 35	9ea	—	53 7	
Allinson (994 P&M) existing entry					
Allinson (994 P&M)					
dried yeast	4oz	16 0	—	1 9	
starch-reduced rolls					
white	10	63 9	—	2 1	
(3 doz.)					
brown	10	66 3	—	2 2	
(3 doz.)					
white	28	34 9	—	3 8	
brown	28	34 9	—	3 8	
Alluwant (210 8&C)					
hot water bottle					
de luxe	198 0	—	25 0		
standard	132 0	—	16 6		
Alphosyl (1178 Stafford)					
cream	60gm	110 1	27 6	16 1	
Ambassador (1363 Zygmont)					
after-shave lotion					
small	—	—	12 6		
Cologne small	—	—	17 6		
deodorant and anti-					
perspirant	—	—	9 6		
pre-shave lotion small	—	—	12 6		
shave bowl	—	—	15 0		
bath cubes	24	—	—		
shave cream	—	—	—		
brushless and lather	—	—	—		
Amethozol (776 JML)					
ointment (vet.)	5gm	18 0	—	—	
Anepidem (802 M5)					
31	6	7 10½	4 2		

Aneurone (576 PH)†					
16oz	7	Oea	—	10 6	
32oz	13	6ea	—	20 3	
80oz	30	Oea	—	45 0	
Angel Face (256 CPL)					
lipstick	25	6 4	—	3 6	
Anso (1343 DW)					
camera					
Autoset 35	—	—	—	590 0	
case	—	—	—	69 6	
cube light	—	—	—	—	
Ansolite IV	—	—	—	44 6	
Ansochrome (1343 DW) existing entry					
Ansochrome (1343 D W)					
film 200					
35mm × 20 exp.	—	—	—	27 9	
35mm × 36 exp.	—	—	—	39 6	
film 100					
35mm × 20 exp.	—	—	—	27 9	
35mm × 12 exp.	—	—	—	21 6	
film T/100					
35mm × 12 exp.	—	—	—	21 6	
film 50					
35mm × 20 exp.	—	—	—	24 6	
35mm × 36 exp.	—	—	—	35 6	
easy loader	—	—	—	84 0	
film roll 120	—	—	—	21 0	
processing kit	—	—	—	21 0	
Anzora (47 Aneston)					
cream	21 0	—	5 3	3 0	
viola	21 0	—	5 3	3 0	
Apple Blossom (596 HR)					
bath essence	3301	—	—	9 6	
salts	3319	—	—	12 6	
cubes	3321	—	—	7 6	
deodorant spray	2422	—	—	8 6	
dusting powder					
spray bottle	3212	—	—	8 6	
sprinkler flask					
3233	—	—	—	9 6	
hand lotion	2234	—	—	9 6	
perfume mist	3014	—	—	21 0	
skin	3002	—	—	13 6	
spray	3102	—	—	25 0	
soap guest (6) 3331	—	—	—	7 6	
complexion (3)	3333	—	—	9 9	
bath (3)	3336	—	—	15 6	
solid fragrance	3020	—	—	9 6	
stick	3460	—	—	21 0	
travellers joy	3121	—	—	—	
perfume concentrate	3121	—	—	—	
Apsin VK (1432 AP5L) T5					
tablets 125mgm	100 9	6ea	—	—	
250 23	0ea	—	—	—	
500 45	6ea	—	—	—	
1000 90	0ea	—	—	—	
250mgm	100 18	0ea	—	—	
250 44	3ea	—	—	—	
500 80	0ea	—	—	—	
1000 175	0ea	—	—	—	
Aquamox (746 Lederle) †s48					
tablets 50mgm	25 8	2ea	—	12 3	
100 31	8ea	—	—	47 6	
Aquamox-R (746 Lederle) †s48					
tablets	25 9	10ea	—	14 9	
100 38	4ea	—	—	57 6	
Ariosa (980 Photopia) existing entry					
Ariosa (980 Photopia)					
flash units					
Ariolux	A33	—	—	36 11	
Ariotron	A37	—	—	259 0	
Ariotron Acca	A36	—	—	399 0	
8.55	A9	—	—	23 10	
8.55F	A11	—	—	39 6	
B.105	A19	—	—	14 6	
Combi	A3	—	—	219 9	
case	A4	—	—	28 6	
Lux 16	A34	—	—	299 6	
Toppy	A18	—	—	30 6	
viewers					
Miniscop	A32	—	—	7 6	
5.44	A35	—	—	25 0	
viewer/cutter	A28	—	—	36 3	

the original half-volume, ideally balanced, TRIPLE ANTIGEN

# TRIVAX

trade mark



BURROUGHS WELLCOME & CO. (The Wellcome Foundation Ltd.) LONDON

\* DIPHTHERIA

\* TETANUS

\* WHOOPING COUGH



Armyl (61 APC) TS										tissues										60 9																													
capsules										16 11 6ea										—										(3 doz)																			
										100 68 4ea										—																													
										1000 659 0ea										—																													
injection 100mgm vial										1 2 6ea										—										3 9																			
Arocin (851 MHP)																																																	
capsules										40 39 11										—										4 9																			
										100 88 3										—										10 6																			
										200 163 10										—										19 6																			
Artane (746 Lederle)†s4B																																																	
Sustets capsules										30 5 8ea										—										8 6																			
50mgm										100 16 0ea										—										24 0																			
Ascon (311 C)†s7																																																	
suspension										8oz 46 0										11 6										6 1																			
tablets										20 25 6										6 6										3 6																			
Astromatic (114 BTC)																																																	
sunglasses										8880/11/2/3/4/5										21 0ea										—										31 6									
										8886/7/8/9										33 4ea										—										50 0									
Athera (851 MHP)																																																	
tablets										40 24 6										6 1 1/2										3 5																			
										100 53 11										13 5 1/2										7 6																			
										500 210 0										52 6										29 6																			
tea										4oz 32 3										8 1										4 6																			
Atkinson (76 Atkinson)																																																	
soap toilet										4860 15 6										3 9										2 3																			
bath										4861 22 4										5 5										3 3																			
à toi (76 Atkinson)																																																	
bath sparkles										—										—										—																			
bubble bath										—										—										—																			
Atomist (495 Gardner)																																																	
medical sprays										1010 136 0										—										17 0																			
										1015 116 0										—										14 6																			
										1020 156 0										—										19 6																			
										1030 144 0										—										18 0																			
										1040 200 0										—										25 0																			
										1042 200 0										—										25 0																			
										1050 120 0										—										15 0																			
										1045										—										—																			
										1072										—										—																			
Atrix (1164 SSL)																																																	
hand care										409 120 1										29 5										17 6																			
tube										413 20 7										5 1										3 0																			
Ayrton (78 A5 & Co.)																																																	
antiseptic cream										tin 10 0										2 6										1 6																			
										14 0										3 6										2 6																			
										18 0										—										2 6																			
burn cream										9 0										2 3										1 6																			
cold sore lotion										10 6										2 7 1/2										1 9																			
corn and wart paint										11 6										2 10										2 0																			
earache drops										—										—										—																			
face cloth										—										—										—																			
"Smart Set"										101 12 0										—										1 6																			
										201 16 0										—										2 0																			
										301 20 0										—										2 6																			
sulphur and yeast tablets										36 9 0										2 3										1 6																			
sulphur lozenges (lime)										2oz 6 4										1 7										1 0																			
zinc and castor oil cream										2oz 10 0										—										—																			
Sundries																																																	
dustcombs fine cut										436 18 4										4 7										—																			
enema "St George"										7 5ea										—										—																			
red										—										—										—																			
Babyclean (47 Aneston)																																																	
deodorant sachets										(9) 20 8										5 2										2 11																			
Bain d'Or (597 HCL)																																																	
bath oil										small 24 7										6 0										3 6																			
Bartex (477 AF & B) sunglasses entry																																																	
Bartex (477 AF & B)																																																	
clip-over sunglasses										standard 52 0										—										6 6																			
										super-lens 1 piece 60 0										—										7 6																			
										2 piece 60 0										—										7 6																			
flip-clips										84 0										—										10 6																			
Bartlett's (477 AF&B)																																																	
sunglasses										child's 266 14 0										—										1 9																			
										teenage 166 10 0										—										1 3																			
										266/A 14 0										—										1 9																			
										ladies 366/B-466/A 20 0										—										2 6																			
										566/A-566/B 28 0										—										3 6																			
										866 39 4										—										4 11																			
										866/A-866/B-866/C 46 0										—										5 9																			
										1266-1366/A-1366/B 47 4										—										5 11																			
										1466/B-1566/A/B 55 4										—										6 11																			
										1567 60 0										—										7 6																			
										1666-1766-1866-1966 71 4										—										8 11																			
										2066-2066/A-2066/B 84 0										—										10 6																			
										2066/C 100 0										—										12 6																			
										3166-3166/A-3166/B 110 0										—										13 9																			
										3266-3366 120 0										—										15 0																			
										3566-3666-3866-4166-4266-4366-4466-4566 127 4										—										15 11																			
										4766 134 0										—										16 9																			
										4966 140 0										—										17 6																			
										5066 143 4										—										17 11																			
5166/A-5166/B-										5166/C 151 4										—										18 11																			
5366-5466-5566-										5666-5766 168 0										—										21 0																			
6066 240 0										—										—										30 0																			
gents 366/A-366/C-										466/B 20 0										—										2 6																			
										666/A-666/B 28 0										—										3 6																			
										766/A-766/B 31 4										—										3 11																			
										1066 46 0										—										5 9																			
										1166-1466/A 47 4										—										5 11																			
										1568 55 4										—										6 11																			
										1666-1766-1966 60 0										—										7 6																			
										2066/A 71 4										—										8 11																			
										2266-2566-2666-2866 84 0										—										10 6																			
										3166/A-3166/B 100 0										—										12 6																			
										3466-3566-3766-3866-3966-4066 120 0										—										15 0																			
										4166-4266-4466 127 4										—										15 11																			
										4666 134 0										—										16 9																			
										4866 140 0										—										17 6																			
										5066 143 4										—										17 11																			
5266-5366-5566-										5666-5766 168 0										—										21 0																			
5866-5966 200 0										—										—										25 0																			
6066 240 0										—										—										30 0																			
B. C. K. (776 JML)																																																	
granules (vet.) 10oz										78 0										—										9 9																			
Becomet (324 Crookes)																																																	
4oz										—										—										—																			
Beecham's (104BP)																																																	
powders										18 9										4 4										2 5																			
										40 3										9 4										5 2																			
										60 136 0										31 5 1/2										2 for 7 1/2																			
										18 9										4 4										2 5																			
										40 3										9 4										5 2																			
Berners Bodyfresh (1372 CCL)																																																	
deodorant roll-on										32 0										7 7										4 11																			
Betnelan (518 Glaxo) TS																																																	
tablets 0.5mgm 30										6 0ea										—										8 0																			
										100 17 0ea										—										22 8																			
										500 80 6ea										—										107 4																			
										0.25 mgm 100										1 1/2										—										13 6									
Betnesol (518 Glaxo) TS																																																	
tablets										0.25mgm 100										12 3ea										—										16 4									
										0.5mgm 100										20 6ea										—										27 4									
										500 96 3ea										—										128 4																			
Betnovate (518 Glaxo) TS																																																	
cream										15gm 6 6ea										—										8 8																			
										30gm 12 3ea										—										16 4																			
lotion										20mils 8 3ea										—										11 0																			
pintment										15gm 6 6ea										—										8 8																			
										30gm 12 3ea										—										16 4																			
Betnovate-C (518 Glaxo) TS																																																	
cream										15gm 6 9ea										—										9 0																			
ointment										15gm 6 9ea										—										9 0																			
Betnovate-N (518 Glaxo) TS																																																	
cream										15gm 6 9ea										—										9 0																			
										30gm 12 9ea										—										17 0																			
lotion										20mils 8 6ea										—										11 4																			
ointment										15gm 6 9ea										—										9 0																			
										30gm 12 9ea										—										17 0																			
tulle 4x4										10 8 9										—										11 8																			
tulle strip 4x40										8 9ea										—										11 8																			
B.F.I. (837 MSD)																																																	
1oz										20 0										5 0										2 11																			
1 1/2oz										36 0										9 0										5 3																			
Bikini (78 A5&Co)																																																	
suntan oil										22 0										5 6										3 9																			
D Biladin (655 ICC) tablets																																																	
Bilston's (125 TJB)																																																	
nerve food										8oz 36 0										—										4 0																			
										16oz 63 0										—										7 0																			
										2oz 27 0										—										3 0																			
Superlex																																																	
Bi-Mycnase (802 5M)																																																	
sachets										12 11 0ea 20 9ea										—										—																			
										100 82 6ea 2 7 1/2ea										—										—																			
Biobalm (851 MHP)																																																	
4oz										21 0										5 3										3 0																			
12oz										51 10										12 11 1/2										7 3																			
Biogastone (117 BPL)																																																	
gel										5gm 10 0ea										—										15 0																			
pellets										25 mgm 20 6 8ea										—										10 0																			
										100 40 0ea										—										60 0																			
Bioral (117 BPL)																																																	
gel										5gm 10 0ea										—										15 0																			
pellets 25 mgm										20 6 8ea										—										10 0																			
										100 40 0ea										—										60 0																			
Birleys (131 Birleys)																																																	
antacid powder										7 0										4 3										2 4																			
										36 0										9 0										5 0																			
										20 0										5 0										2 9																			
tablets †										—										—										—																			
tablets old formula										—										—										—																			
Biskalite (1530 Fison)																																																	
Biskreem (1530 Fison)																																																	
Bragg's (162 Bragg)																																																	
granules										32 6										—										3 6																			
lozenges										50 23 3										—										2 6																			
										100 41 10										—										4 6																			
										27 11										—										3 0																			
										51 2										—										5 6																			
										50 15 6										—										1 8																			
										100 25 7										—										2 9																			
										250 55 10										—										6 0																			
Bronco-Softesse (184 Bronco)																																																	
rolls										double 23 7										—										1 9																			
										(1 1/2 doz)										—										—																			



[illegible]



Gala (876 MP)										hairbrushes ladies										hand delight 2216										
brush line	1047	39	6	9	10½	5	9			Carefree D366	41	3	10	4	5	11					herbal skin tonic	0315								
lipstick	1022	39	6	9	10½	5	9			Hanimex (565 Hanimex)											0314									
slim line	1023	39	6	9	10½	5	9			projectors slide											0318									
liquid line	1043	39	6	9	10½	5	9			Hanomat 1000											toilet soap (3)	8013								
maskara refill	1052	39	6	9	10½	5	9			iodine quartz	293	4ea			440	0					Liquidine	0651								
matte shadow	1044	39	6	9	10½	5	9			projectors cine											maskara remover	1741								
mutation mink										Loadmatic	AL	406	0ea			609	0				remover pads	1742								
flowing velvet	1016	39	6	9	10½	5	9			<b>Harmony (412 Elida)</b>										pasteurized cream	0102									
velvet finish	1013	39	6	9	10½	5	9			hair colour tube	22	6	5	7½	3	3					0104									
natural bloom	1038	39	6	9	10½	5	9			<b>Harpic (1037 Reckitt)</b>										refining lotion	0322									
shadow stick	1045	39	6	9	10½	5	9			lavatory cleanser B	15	9			1	9				0324										
maskara Fast Lash	51	4		12	10		7	6		A	25	4			2	10				shampoo										
Velvet Bloom										<b>Harriet Hubbard Ayer (852 Molyneux)</b>										blonde tone	8542									
compact	44	6		11	1½		6	6		base ultra fine					29	9				brunette tone	8552									
brush	65	0		16	3		9	6		<b>Heaven Sent (596 HR)</b>										8552										
complete	106	0		26	6		15	6		bath cubes (6) 4321					7	6				redhead	8562									
<b>Genasprin (1530 Fisons)</b>										essence 4301					9	6				silk sheen	8512									
tablets	28	13	2	3	3		2	0		salts 4319					12	6				silver tone	8522									
	50	22	0	5	6		3	3		dusting powder										silk minute make-up										
	100	36	8	9	2		5	6		flask 4233					9	6				refill 1212										
<b>Genticin (187 B5) T5</b>										spray bottle 4212					8	6				special refill 1232										
injection vial										hand lotion 2244					9	6				silk tone foundation	1401									
2mils	6	141	0							perfume mist spray										special 1411										
	25	576	6							4014					21	0				skin toning lotion	0344									
<b>Germolene (104 BP)</b>										pressure spray										special 0348										
tin	19	6		4	6		2	6		4102					25	0				Water Lily cleansing cream	0112									
	37	0		8	7		4	9		4002					13	6				0114										
tube	19	6		4	6		2	6		soap complexion (3) 4333					9	9				0118										
<b>Germoplast (104 BP)</b>										bath (3) 4336					15	6				youthifying eye cream	0640									
	9	0					1	0		perfume bottle 4121										bath cubes	8031									
	18	0					2	0		<b>H.E.B. (589 HEB)</b>										beauty case	8913									
<b>Gillette (514 Gillette)</b>										"A" 3oz 52 0					6	3				fashion matte										
shaving cream										8oz 90 0					11	6				shadow 1765										
foamy aerosol	43	1		10	4		5	11		24oz 21 1ea					31					Natural Blush	1830									
blades Aristocrat (4)	46	10		11	5		4	0		7lb 75 0ea										telescope brush	1835									
	(20 pkts)			(20 pkts)						burn cream 8oz 45 0			12	0	6	2				beauty case	8938									
<b>Gnome (520 Gnome)</b>										24oz 90 0			23	0	13					hand cream	2202									
projectors										dp 3lb 15 0ea									Herbessence bath soap	8025										
Alphax Major	721						630	0		dp 7lb 30 0ea					7	0				hormone night cream	0404									
Classic Insta	762						229	0		calamine 3oz 48 0			12	0	11	10				perfection cream	0221									
Mini	763						229	0		8oz 81 0			21	0	11	10				skin toning lotion	0334									
rangefinder							34	8		24oz 20 0ea			5	0ea	35	0				sun tan foam	2820									
screens lightweight										compound 3oz 48 0					6	0				vitamin nail food	2290									
24 x 32							52	6		8oz 81 0					10	6				Hermesetas (1000 PPL)										
30 x 30							58	6		24oz 20 0ea					30	0				Hermesetas (338 Cussons)										
30 x 40							61	6		diphiodin 3oz 48 0			12	0	7	0				Hill's (605 Hill's)										
40 x 40							77	6		8oz 81 0			21	0	11	10				balsam pastilles	20	4		5	1					
50 x 50							109	6		24oz 20 0ea			5	0ea	35	0				bronchial balsam	28	0		7	0					
<b>Glo-ahead (1188 Steiner)</b>										IG 62 solution entire entry										†DDI	47	0		11	9					
hair colouriser	37	6		9	4		5	6		IG 4 solution 8oz 6 0ea										junior balsam	23	4		5	10					
extra	41	0		10	3		6	0		20oz 12 6ea										<b>Hormofemin (830 Medo)</b>										
<b>Goya (532 Goya)</b>										40oz 24 6ea										cream ts4B	72	0		9	4½					
Timeless										80oz 48 0ea										<b>Hycal (103 BF)</b>	(2 doz)									
creme perfume										lac 8oz 42 0			11	0	6	2				Hyperduric (34 A&H) injections										
flowette	58	5		14	2½		8	6		20oz 90 0			23	0	13	1				Ilford (645 Ilford)	8	9ea	1	0e						
perfume royal										40oz 14 3ea			3	7ea	25	0				Ilotycin (413 Lilly)										
flacon	867	0		216	0		126	0		80oz 48 0ea					44	8				ophthalmic ointment	1dr									
Cologne	170cc									"M" 3oz 48 0					6	0				<b>Imprudence (1350 Worth)</b>										
eau de toilette	25cc									8oz 81 0					10	6				eau de Cologne	57cc									
<b>Gradely (255 Cheetham)</b>										24oz 20 0ea					30	0				114cc										
foot paste	17	6		4	4		2	6		normal 8oz 66 0			17	0	9	7				228cc										
<b>Granobisk (535 Granose)</b>										24oz 11 6ea			2	10ea	20	0				½ litre										
	16	17	4				1	9		48oz 21 0ea				5	3ea					1 litre										
<b>Granogen (535 Granose)</b>										7lb 45 0ea			11	3ea						eau de toilette	57cc									
1lb	8	8ea					10	6		"O" 3oz 48 0					6	0				114cc										
1lb	8	8ea					10	6		8oz 81 0					10	6				229cc										
<b>Granose (535 Granose)</b>										24oz 20 0ea					30	0				½ litre										
fruit bran	8oz	19	9				2	0		parisepsin cream 3oz 48 0			12	0	7	0				Hyperduric (34 A&H) injections										
meatless steak	16oz	36	3				3	8		8oz 81 0			21	0	11	10				Ilford (645 Ilford)	8	9ea	1	0e						
peanut butter	6oz	16	0				1	8		24oz 20 0ea			5	0ea	35	0				Ilotycin (413 Lilly)										
	12oz	28	0				2	11		emulsion 20oz 102 0			26	0	15	2				ophthalmic ointment	1dr									
peanut crumble																														



an Nate (248 COTR)										parfum de toilette										8oz										42 6									
bath luxuries										atomiser (luxe)										16oz										63 0									
bath bubbles										refill										mist										21 0									
friction/cologne										(sport)										iceberg										9 9									
8oz										(suede)										bath salts										14 9									
16oz										84cc										cubes (6)										8 0									
32oz										84cc										oil, plain or										11 3									
talcum										84cc										bubbling										17 6									
in Sorelle (669 Sorelle) existing entry										84cc										—										9 0									
an Sorelle (669 Sorelle)										atomiser handbag										brilliantine										—									
after bath friction										refill										deodorant, cologne										—									
SO154										9.5cc										or stick										8 6									
after shave lotion										7cc										dusting powder										15 9									
SO152										9.5cc										essence small										15 0									
anti-perspirant										14cc										loz										30 0									
aerosol										28cc										hair mist										12 6									
SO601										56cc										hand lotion										9 9									
apothecary jar										150cc										shampoo										9 6									
SO107										7cc										soap guest (6)										9 6									
plastic										3.5cc										toilet (3)										10 9									
SO117										362gm										bath (1)										5 6									
miniature										92gm										talcum										7 9									
SO604										110 gm										traveller										13 9									
aquafloa bubble										100 gm										weekender hair										18 9									
bath										—										mist										7 9									
bath cubes										—										Limmits (1552 UL)										—									
SO204										—										milk chocolate										2 6									
SO153										—										20 3										—									
bath essence										—										3 0										—									
SO153										—										4 3										—									
bouquet of carnations										—										8 4										—									
SO209										—										15 7										—									
Devon violets										—										9 6										—									
SO210																																							
roses										—										4 3										5 11									
SO208										—										8 4										5 0									
bubble bath powder										—										15 7										9 6									
SO221										—										6 1										8 6									
minaret										—										5 4										7 6									
SO221										—										7 6										10 6									
shampoo—shower										—										11 9										16 6									
lotion										—										18 3										25 6									
SO602										—										3 7										5 0									
cat plastic										—										3 11										5 6									
SO116										—										60 0										8 9									
champagne bubble										—										13 4										8 0									
bath										—										56 0										—									
SO19A										—										—										—									
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dog vinyl with										—										—										—									
bath crystals										—										—										—									
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fish vinyl with bath										—										—										—									
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[illegible]







Prices are given in the sequence: Trade price per doz./purchase tax per doz./retail price (bold if maintained), thus:—17s 11d/ 4s 3d/2s 3d. A dash— in any column indicates that the manufacturer has provided no figure appropriate to that column.

[illegible]

## AMENDMENTS AND ADDITIONS TO KEY TO SUPPLIERS

665 JW—Jacob, White & Co., Ltd., 324 Upper Street,  
London, N.1. Canonbury 3233.  
684 Kaylene—Kaylene Chemicals Division, Forestal  
Industries (U.K.), Ltd., Foundry Lane, Ditton,  
Widnes, Lancs. Widnes 5351.

**Birmingham · Bournemouth · Leeds · Liverpool · Cardiff · Bristol**

# ORRIDGE & CO.

## CHEMISTS' STOCKTAKERS

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